



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

SEP 05 2016

**CERTIFIED MAIL**

REPLY TO THE ATTENTION OF:

**RETURN RECEIPT REQUESTED 7009 1680 0000 7677 8398**

Ms. Kayla Criswell  
Environmental/Project Engineer  
Rochester Metal Products Corporation  
616 Indiana Avenue  
Post Office Box 488  
Rochester, Indiana 46975

Re: Request for Information  
EPA I.D. No.: INR000007161

Dear Ms. Criswell:

By this letter, the U.S. Environmental Protection Agency requests information under Section 3007 of the Resource Conservation and Recovery Act (RCRA), as amended, 42 U.S.C. § 6927. Section 3007 authorizes the Administrator of EPA to require you to submit certain information.

This request requires Rochester Metal Products Corporation (the facility or you) to submit certain information relating to a hazardous waste determination on a solid waste generated at your facility located at 616 Indiana Avenue, in Rochester, Indiana. We are requiring this information to determine the facility's compliance status with RCRA and Title 329 of the Indiana Administrative Code. The enclosure specifies the information you must submit. You must submit this information within 30 calendar days of receiving this request to the United States Environmental Protection Agency, Attention: Todd Brown, 77 West Jackson Boulevard, LR-8J, Chicago, Illinois 60604.

You may, under 40 C.F.R. Part 2, Subpart B, assert a business confidentiality claim covering all or part of the information in the manner described in 40 C.F.R. § 2.203(b). We will disclose the information covered by a business confidentiality claim only to the extent and by means of the procedures at 40 CFR Part 2, Subpart B. You must make any request for confidentiality when you submit the information since any information not so identified may be made available to the public without further notice.

Rochester Metal Products Corporation must submit all requested information under an authorized signature certifying that the information is true and complete to the best of the signatory's knowledge and belief. Should the signatory find, at any time after submitting the requested information, that any portion of the submitted information is false, misleading or incomplete, the signatory should notify us. Knowingly providing false information in response to



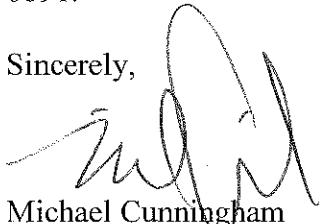
this request, may be actionable under 18 U.S.C. §§ 1001 and 1341. We may use the requested information in an administrative, civil or criminal action.

This request is not subject to the Paperwork Reduction Act, U.S.C. § 3501 *et seq.*, because it seeks collection of information from specific individuals or entities as part of an administrative action or investigation.

Failure to comply fully with this request for information may subject Rochester Metal Products Corporation to an enforcement action under Section 3008 of RCRA, 42 U.S.C. § 6928.

You should direct questions about this request for information to Todd Brown, at (312) 886-6091.

Sincerely,



Michael Cunningham  
Chief  
Compliance Section 1

Enclosure

cc: Nancy Johnston, Indiana Department of Environmental Management (IDEM)  
[\(njohnsto@idem.in.gov\)](mailto:(njohnsto@idem.in.gov))  
Susan Lowry, IDEM, [\(slowry@idem.in.gov\)](mailto:(slowry@idem.in.gov))



## **REQUEST FOR INFORMATION**

**Instructions:** You must respond separately to each of the questions or requests in this attachment. Precede each answer with the number of the Request for Information to which it corresponds. For each document produced in response to this Request for Information, indicate on the document, or in some other reasonable manner, the number of the question to which it responds.

### **Background**

On February 13, 2014, Republic Services, Inc., (RSI) informed the Indiana Department of Environmental Management (IDEM) of a non-conforming waste acceptance event at the County Line Landfill (CLLF) in Fulton County, Indiana (Attachment 1). In its notification, RSI stated that on January 20, 2014, it received from a customer one 15 cubic yard container of transfer and pouring slag for disposal that may have been a hazardous waste. An analysis conducted by Rochester Metal Products Corporation (RMP) had demonstrated the slag had a barium Toxicity Characteristic Leaching Procedure (TCLP) concentration of 550 mg/L.

On February 27, 2014, RSI informed IDEM that RMP was the generator of the afore-mentioned container of slag waste. RSI further stated that the afore-mentioned analysis was the result of a “sampling protocol error,” and does not properly represent the slag waste sent to CLLF for disposal (Attachment 2).

In its own letter dated February 27, 2014 (Attachment 3), RMP explains that the sample collection method was not representative of the point of generation for the slag. RMP explained that the point of generation is the melt furnace and transfer ladles, where slag is pulled off multiple times per day and placed in a hopper. RMP stated that a representative sample is one collected from several locations within the hopper containing slag generated from production throughout the day. RMP stated that three samples from the “slag hopper” collected on January 27, 2014, and three more collected on January 31, 2014, yielded TCLP barium concentrations below the regulatory level.

On March 5, 2014, EPA conducted a compliance evaluation inspection at RMP; the purpose of which was to evaluate RMP’s compliance with hazardous waste generator standards under the Resource Conservation and Recovery Act. During the inspection, the EPA inspector inquired about the non-conforming slag waste that RMP shipped to CLLF. In response, RMP explained that the results were a product of a non-representative sample. The EPA inspector obtained from RMP copies of the following analytical reports prepared by TestAmerica, University Park, Illinois.

- TestAmerica Job ID: **500-70310-1**  
Client Project/Site: **Solid Waste Analysis**  
Date: 1/24/2014



- TestAmerica Job ID: **500-70738-1**  
Client Project/Site: **Transfer & Pouring Slag**  
Date: 2/19/14
- TestAmerica Job ID: **500-70740-1**  
Client Project/Site: **Ajax Side Floor Slag**  
Date: 2/19/14
- TestAmerica Job ID: **500-70741-1**  
Client Project/Site: **Hunter Pouring Slag**  
Date: 2/19/14
- TestAmerica Job ID: **500-70966-1**  
Client Project/Site: **Slag Test**  
Date: 2/25/14

Copies of these reports are provided in Attachments 4 through 8.

### Requests

1. Identify all persons consulted in preparing the answers to this Request for Information. Provide the full name and title for each person identified.
2. Provide a detailed description of RMP's production processes, including all processes where wastes were generated. Include in the description the materials and equipment used in the processes; the products and by-products of the processes; the wastes generated and the disposition of the products, by-products and wastes after they are generated from the processes. Provide process diagrams where available.
3. Identify all processes and equipment that generate slag at your facility.
4. Identify the manner in which all slag generated at the facility is accumulated. State whether slag generated from separate processes and/or equipment is accumulated separately for disposal, or whether all slag generated at the facility is accumulated in the same containers for disposal. If slags are accumulated separately, identify the different types of slag, and their sources.
5. What are the sources of barium in the slag generated at RMP?
6. The analytical report for TestAmerica Job ID: 500-70310-1, includes the results of a TCLP analysis on the Client Sample ID: Transfer and Pouring Slag, collected on January 17, 2014. The TCLP extract for this sample yielded a barium concentration of 550 mg/L. With respect to this sample, provide the following information:



- a) Identity the equipment this sample was **directly** collected from (e.g., slag hopper, furnace, transfer ladle, etc.).
  - b) Describe the sampling method used. If the sample was a composite, include in your answer how the composite was formed.
  - c) Identify the processes and/or equipment that generated the slag that was sampled.
  - d) RMP has stated that the TCLP barium concentration yielded by this sample is not representative of the slag generated at its facility. Explain how the sampling method followed, and/or the material sampled, resulted in a sample whose barium concentration is five times higher than the regulatory level (for classification as a hazardous waste), and higher than what RMP believes is representative of the slag waste.
  - e) Provide a copy of your written sampling and analysis plan or other similar sampling protocol that was in existence at the time you collected this sample
7. The analytical reports for TestAmerica Job IDs: 500-70738-1, 500-70740-1, and 500-70741-1, include the results of TCLP analyses for three samples collected on January 27, 2014, and identified by the Client Sample IDs: Transfer & Pouring Slag, Ajax Side Floor Slag, and Hunter Pouring Slag, respectively. With respect to these samples, provide the following information.
- a) Identify the equipment that **each** of the samples was **directly** collected from.
  - b) Describe the sampling method(s) used to collect each of the samples. If the samples were composites, include in your answer how each composite was formed.
  - c) Provide a copy of any written sampling and analysis plan or other similar protocol that was in existence at the time the sample was collected.
  - d) Identify the manufacturing processes and equipment that generated the slag which was sampled and referred to as: "Transfer and Pouring Slag."
  - e) Identify the manufacturing processes and equipment that generated the slag which was sampled and referred to as: "Ajax Side Floor Slag."
  - f) Identify the manufacturing processes and equipment that generated the slag which was sampled and referred to as: "Hunter Pouring Slag."
8. The analytical report for TestAmerica Job ID: 500-70966-1, includes the results of a TCLP analyses for three samples collected on January 31, 2014, and identified by the Client Sample IDs: Slag Rolloff 1, Slag Rolloff 2, and Slag Rolloff 3. With respect to these samples, provide the following information:



- a) Identify the equipment that **each** of the samples was **directly** collected from.
  - b) Describe the sampling methods used to collect each of the samples. If the samples were composites, include in your answer how each composite was formed.
  - c) Provide a copy of any written sampling and analysis plan or other similar protocol that was in existence at the time the sample was collected.
  - d) Identify the manufacturing processes and equipment that generated the slag which was sampled and referred to as: "Slag Rolloff 1."
  - e) Identify the manufacturing processes and equipment that generated the slag which was sampled and referred to as: "Slag Rolloff 2."
  - f) Identify the manufacturing processes and equipment that generated the slag which was sampled and referred to as: "Slag Rolloff 3."
9. The Slag Rolloff 3 sample yielded a barium TCLP concentration of 93 mg/L. The Slag Rolloff 1 sample yielded a barium concentration of 15 mg/L. All of the other slag samples that were collected on January 27<sup>th</sup> and 31<sup>st</sup>, 2014, yielded barium concentrations below the reporting limit (i.e., <0.50 mg/L). Can RMP account for the level of variability in the barium concentration of the aforementioned samples? If so, explain.
10. Identify the frequency at which RMP analyzes its slag waste for the purpose of hazardous waste characterization.
11. Provide true and accurate copies of all reports pertaining to hazardous waste determinations on RMPs slag for the five year period immediately preceding your receipt of this Request for Information (Note: You need not include those reports attached to this Request for Information and identified above).
12. Does RMP follow a written plan or protocol for collecting samples of its slag waste for the purpose of hazardous waste characterization? If so, provide a true and accurate copy of that document.
13. Provide the following certification by a responsible corporate officer:

I certify under the penalty of law that I have examined and am familiar with the information submitted in responding to this information request for production of documents. Based on my review of all relevant documents and inquiring of those individuals immediately responsible for providing all relevant information and documents, I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



**Attachment 1**

**County Line Landfill Non-Conforming Waste Acceptance  
Notification  
February 13, 2014**





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County Line Landfill Partnership  
7922 North Old US HWY 31  
Argos, IN 46501  
Tel: (574) 892-6483

February 13, 2014

Ms. Alicia Brown  
Solid Waste Permits Section  
Office of Land Quality  
100 North Senate Avenue  
MC 65-45 IGCN 1101  
Indianapolis, IN 46204-2251

**Re: County Line Landfill Non-Conforming Waste Acceptance Notification  
Solid Waste Facility Permit FP 25-03, Fulton County**

Dear Ms. Brown:

As specified by the permit requirements of Solid Waste Facility Permit 25-03 (A3), we hereby provide the 7 day written notification of the non-conforming waste acceptance event at the County Line Landfill (CLLF). On Friday, February 7<sup>th</sup>, at approximately 9 am (cst), CLLF was notified by a local Special Waste Generator (Generator) that the landfill unknowingly accepted one load of contaminated slag (Transfer & Pouring Slag), of which may have been a hazardous waste. CLLF was informed that analytical results, obtained after the waste had been received at the landfill, demonstrated that the slag had a TCLP Barium level of 550 mg/l, compared to the acceptable level of less than 100 mg/l. The 1 day verbal notification was made to you by voice message at approximately 12:15 pm, and Ms. Anne Weinkauf (IDEM-Field Compliance Inspector) at approximately 12:40 pm.

The Generator has conducted an investigation to determine the actual day, amount and cause of the non-conforming slag that was delivered to CLLF. The incident occurred during the week of January 13<sup>th</sup> through the 17<sup>th</sup>, where one job (3 hour production run, equivalent to 3% of the weekly production rate) was run using the Inobar (Barium) during the gray iron production process. The Generator is currently testing another sample to confirm that the previously generated slag was contaminated. The date of the non-conforming slag that was unknowingly

Indiana Department of Environmental Management  
Office of Land Quality  
February 13, 2014

Page 2

accepted by CLLF occurred on Friday, January 17<sup>th</sup>, and was delivered to the landfill for disposal on Monday, January 20<sup>th</sup>. The slag volume consisted of a 15 yard roll-off container that weighed approximately 11 tons. The slag is typically used to construct the tipper pad or fill in depressions within the working face area before being covered with another layer of waste. The area potentially impacted is very small since the load was documented and the area identified to prevent future filling. It is important to note that all environmental controls are in place and there is no cause for an imminent or substantial endangerment to human health or environment.

The slag is an approved special waste stream for disposal at CLLF and there have been no historical issues with this material. Also, special waste profile number 4714Y22796 was last recertified on February 14, 2011 and is currently in the process of being recertified for an estimated 4,500 cubic yards annually. After being notified by the Generator of the non-conforming waste load, CLLF has ceased to accept this material until a thorough investigation has been completed, operational procedures have been established to prevent future events from occurring, and analytical testing confirms the generation process is acceptable for disposal.

CLLF at this time is requesting guidance based on the attached Inobar Safety Data Sheet on whether the non-conforming slag load can remain in-place or needs to be exhumed and sent back to the Generator for proper disposal. Please contact Mike Houlditch, Special Waste Sales Rep at 260-310-3235, or myself at 219-306-2368 if you have any questions.

Sincerely,



Derek Mauntel  
Environmental Manager

Attachment: Inobar Safety Data Sheet

Cc: Anne Weinkauf, IDEM Field Inspector (via email)  
Charles Grady, IDEM Section Chief (via email)  
Dave Moss, Mike Houlditch, County Line Landfill Partnership (via email)  
Bill Eggleston, Clarke Lundell, Steve Smith, Mark Phillips & Rich Thompson, RSI (via email)

**PEM**

PECHINEY ELECTRONETALURGIE  
Société Anonyme au Capital de 317 138 000 Frs  
642 005 177 R.C.S. Nanterre  
6, Place de l'Iris - COURBEVOIE  
Tour Manhattan  
92087 PARIS LA DÉFENSE CEDEX

## SAFETY DATA SHEET

### Specific Hazards - Labelling

Explosive H <sub>1</sub>	Toxic H <sub>1</sub>	Easily inflammable H <sub>1</sub>
Combustive H <sub>1</sub>	Harmful H <sub>1</sub>	Inflammable H <sub>1</sub>
Corrosive H <sub>1</sub>	Irritant H <sub>1</sub>	

### 1 - IDENTIFICATION

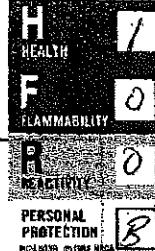
#### INOBAR

1.1 - Product identification :

1.2 - Supplier : Manufacturer  
- Department: FOUNDRY

PEM

- Dealer : (see stamp above)  
Tél. 33 (1) 47.62.88.00



### 2 - COMPOSITION

: FeSi based inoculant with Si 63 % - Ba 9% - Ca 1 % (Typical values)

- Substance /or/ Preparation : Alloy

- Impurities (representing a hazard) : no to our knowledge

### 3 - POTENTIAL HAZARDS

3.1 - Professional hazards : None flammable

3.2 - Environmental hazards : no to our knowledge

### 4 - FIRST AID PROCEDURES

Skin contact : None  
Eye contact : Mechanical irritation. Flush eyes with water  
Inhalation : Irritating cough, move to well ventilated area  
Accidental ingestion : None  
Burn : None  
Medical assistance needed/advisable : None  
Other : None

### 5 - FIRE PREVENTION

5.1 - Flash point in closed space : ..../....°C following : not flammable  
5.2 - Auto inflammability point : ..../....°C following : not flammable  
5.3 - Specific fire or explosion hazards : not flammable  
5.4 - Extinguishing methods : slight release of hydrogen when in contact with alkalis water  
- Recommended : sand, dry powder extinguishers  
- Unadvisable : alkaline products such as lime  
5.5 - Special protective measures for fire fighting : avoid creating a cloud of dust  
5.6 - Other recommendations : cover the product with dry sand if necessary

# DUCT INOBAR

## ACCIDENTAL RELEASE MEASURES :

- 6.1 - Personal precautions : Use glove and safety goggles
- 6.2 - Environmental precautions : Collect up the product and keep under cover in well ventilated conditions, avoid using compressed air, keep dry.
- 6.3 - Method for neutralizing or destroying the product : Recycling by the product plant

## 7 - STORAGE AND HANDLING

- 7.1 - Special precautions when storing and handling : store under cover in dry condition.
- 7.2 - Packing material to be avoided : no to our knowledge

## 8 - PERSONAL PROTECTION

VME 10 mg/m<sup>3</sup> of total dust

- 8.1 - Personal prevention and protective measures { mask  gloves  goggles   
other:
- 8.2 - Special protection measures : avoid forming and emitting dust particles

## 9 - PHYSICO-CHEMICAL PROPERTIES

	Solid	Pasty	Liquid	Gaseous
9.1 - Physical state - at 20°C	<input checked="" type="checkbox"/>	H <sub>T</sub>	H <sub>T</sub>	H <sub>T</sub>
- at .....°C	H <sub>T</sub>	H <sub>T</sub>	H <sub>T</sub>	H <sub>T</sub>
- colour : grey		- Odor : /		
9.2 - Temperatures: 2000°C	- at melting point	1200 °C	- at initial dilution >1500°C	- at decomposition
9.3 - pH :	- at delivery	.....	- at suggested dilution for use	.....
9.4 - Solubility :	- in water		- dilution (g/l)	- non miscible
	- at 20 °C	.....		
	- at .....°C	.....		
	- in solvants			
9.5 - vapour pressure :	- at 20°C .... mbar (vapour emissions to be monitored)		- at .....°C .... mbar	
9.6 - Specific gravity		Vapour	Liquid	Solid
- at 20 °C		.....kg/m <sup>3</sup>	.....g/cm <sup>3</sup>	4,5 g/cm <sup>3</sup>
- at .....°C		.....kg/m <sup>3</sup>	.....g/cm <sup>3</sup>	.....g/cm <sup>3</sup>
9.7 - Other data				

## 10 - STABILITY AND REACTIVITY

- 10.1 - Hazardous decomposition products : no to our knowledge
- 10.2 - Hazardous reactions with : Possible formation of arsine and/or phosphine  
Preventive measures : Do not use in a confined area

JCT

## INOBAR

### TOXICOLOGY

11.1 - Metabolic effects of product: no to our knowledge

11.2 - Observed pathological effects or possible hazards for:

- skin                      )
- eyes                      )
- Respiratory system      )
- Nervous system            )         no to our knowledge
- Ingestion                )
- Allergies                )
- Hematology              )
- Other                    )

11.3 - Fumes : possible in moist conditions

Nature	Recommended Methods of detection and dosage in the air	Limit of average concentration for 8 h or threshold			
Arsenic hydride            AsH <sub>3</sub>	DRAEGER Tubes	VME	0.8 mg/m <sup>3</sup>	VLE	0.8 mg/m <sup>3</sup>
Phosphorus hydride        PH <sub>3</sub>		VME	0.13	VLE	0.4

### 12 - ENVIRONMENTAL PROTECTION

12.1 - Ecotoxicity

- Waste                      )         no to our knowledge
- Biodegradability        )

12.2 - Special texts

### 13 - DISPOSAL CONSIDERATIONS

13.1 - Elimination of waste : no special precaution to our knowledge

13.2 - Destruction procedures for contaminated packing : incineration, recycling

- Haz

# UCT INOBAR

## - TRANSPORTATION

14.1 - By land and fluvial

. French regulation

. R.I.D. - A.D.R. ~~NOOT~~

DANGEROUS GOODS

Class : Group :

Hazard n°: Label n° :

Class and number of list: ~~NOOT~~

DANGEROUS

Label :

14.2 - By sea

. O.M.C.I.

14.3 - By air

.I.A.T.A.

Class :

Label

Class :

article n° :

Label :

## 15 - REGULATORY INFORMATION

This data sheet only outlines the principal legislative and regulatory texts promulgated ..... relating to this product (substance or preparation). It should not be regarded as an exhaustive listing and does not, in any way, exempt the user of the product from referring to the totality of the official texts in order to learn the full extent of his/her obligations .

## 16 - OTHER PERTINANT INFORMATION

Place of issue: Paris La Défense Date of issue 04.07.97

Supplier's stamp

*PEM*

RECHERCHE ELECTROMETALLURGIE  
Société Anonyme au Capital de 301 138 000 Frs  
642 005 177 R.C.S. Nanterre  
6, Place de l'Iris - COURBEVOIE  
Tour Manhattan  
92087 PARIS LA DEFENSE CEDEX

0.1

This data sheet complements the user's instructions but does not replace it . The information contained is based on our knowledge about the product as of 01.07.1990.

## **Attachment 2**

**RSI Letter**  
**February 27, 2014**





County Line Landfill Partnership  
7922 North Old US HWY 31  
Argos, IN 46501  
Tel: (574) 892-6483

February 27, 2014

Ms. Alicia Brown  
Solid Waste Permits Section  
Office of Land Quality  
100 North Senate Avenue  
MC 65-45 IGCN 1101  
Indianapolis, IN 46204-2251

**Re: County Line Landfill Non-Conforming Waste Acceptance Notification  
Solid Waste Facility Permit FP 25-03, Fulton County**

Dear Ms. Brown:

Rochester Metals Products Corp. (RMP) is the generator of the transfer and pouring slag load that was potentially accepted by the County Line Landfill (CLLF) as the non-conforming waste event. RMP is concurrently preparing a separate letter to the Indiana Department of Environmental Management (IDEM) that documents a sampling protocol error that has resulted in a finding that does not properly represent the special waste stream being delivered to the landfill for disposal. All additional samples taken on multiple dates confirm that the analytical results for barium are below the Barium TCLP threshold. Therefore, CLLF is requesting a final determination or no further action required in light of this new information. Please contact me at 219-306-2368 if you have any questions.

**RECEIVED**

Sincerely,

A handwritten signature in black ink, appearing to read "Derek Maantel".

Derek Maantel  
Environmental Manager

MAR 06 2014

DEPARTMENT OF  
ENVIRONMENTAL MANAGEMENT  
OFFICE OF LAND QUALITY

Cc: Kelly Hall, IDEM Section Chief (via email)  
Dave Moss, Mike Houlditch, County Line Landfill Partnership (via email)  
Bill Eggleston, Clarke Lundell, Steve Smith, Mark Phillips & Rich Thompson, RSI (via email)



## **Attachment 3**

**RMP Letter**  
**February 27, 2014**





## ROCHESTER METAL PRODUCTS CORP.

Quality Iron Castings

616 Indiana Avenue  
P.O. Box 488 Phone 574-223-3164  
Fax 574-223-2326  
ROCHESTER, INDIANA 46975

February 27, 2014

RMP reviewed the sample collection method for the sample collected on 1/17/14. We believe it is not representative of the point of generation for the slag generated from the production lines. The point of generation source for the production lines is the melt furnace and transfer ladles, where slag is pulled off multiple times per day and placed in a hopper. A representative sample of slag from these production lines is one that is collected from several locations within the hopper containing slag generated from production throughout the day.

Three samples collected from throughout the slag hopper on 1/31/14 show results below the Barium TCLP threshold. Also three samples were collected on 1/27/14 that showed results below the Barium TCLP threshold. RMP is formalizing its Sampling and Analysis Plan (SAP) for waste characterization, including slag. The revised SAP will include protocols for the collection of samples representative of the average properties of the entire waste stream. We believe improvement and clarification of the SAP moving forward will prevent future reoccurrence.

While RMP notes that the 1/17/2014 slag results showed the particular sample as hazardous, we believe that the sample was not representative based upon the protocol. We have done additional sampling which has shown that slag as non-hazardous. At this point, we believe we have had a sampling protocol error that has resulted in a finding that does not properly represent the waste. For these reasons, RMP is continuing to evaluate the sampling protocol in order to make sure the protocol provides representative results.

If there are any questions please contact me at (574) 223-0461.

Sincerely,

A handwritten signature in black ink that reads "Kayla Criswell".

Kayla Criswell  
Environmental/Project Engineer

RECEIVED

MAR 06 2014

DEPARTMENT OF  
ENVIRONMENTAL MANAGEMENT  
OFFICE OF LAND QUALITY



## **Attachment 4**

### **Analytical Report for TestAmerica Job ID: 500-70310-1 Solid Waste Analysis**



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-70310-1

Client Project/Site: Solid Waste Analysis

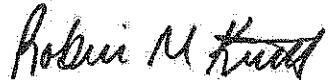
For:

Rochester Metal Products Corp.

616 Indiana Ave

Rochester, Indiana 46975

Attn: Kayla Criswell



Authorized for release by:

1/24/2014 12:39:33 PM

Robin Kintz, Project Manager II

(708)534-5200

robinm.kintz@testamericaninc.com

### LINKS

Review your project  
results through

**Total Access**

Have a Question?

Ask  
The  
Expert

Visit us at:  
[www.testamericaninc.com](http://www.testamericaninc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

## Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Method Summary . . . . .	4
Sample Summary . . . . .	5
Client Sample Results . . . . .	6
Definitions . . . . .	16
QC Association . . . . .	17
QC Sample Results . . . . .	19
Chronicle . . . . .	21
Certification Summary . . . . .	24
Chain of Custody . . . . .	25
Receipt Checklists . . . . .	26

## Case Narrative

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

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**Job ID:** 500-70310-1

**Laboratory:** TestAmerica Chicago

---

**Narrative**

Job Narrative  
500-70310-1

**Comments**

No additional comments.

**Receipt**

The samples were received on 1/20/2014 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

**Metals**

No analytical or quality issues were noted.

## Method Summary

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

RECEIVED BY TESTER DATE TESTED TESTER'S SIGNATURE

TestAmerica Chicago

## Sample Summary

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-70310-1	Shot Blast Waste	Solid	01/17/14 11:00	01/20/14 09:35
500-70310-2	Shell Core Spill & Sand Cores	Solid	01/17/14 11:00	01/20/14 09:35
500-70310-3	Cold Box Spill Sand w/Cores	Solid	01/17/14 11:00	01/20/14 09:35
500-70310-4	Transfer & Pouring Slag	Solid	01/17/14 11:00	01/20/14 09:35
500-70310-5	Sand System DC Fines	Solid	01/17/14 11:00	01/20/14 09:35
500-70310-6	Melt System Fines	Solid	01/17/14 11:00	01/20/14 09:35
500-70310-7	Ladle Refractory	Solid	01/17/14 11:00	01/20/14 09:35
500-70310-8	Preheater Scalpings	Solid	01/17/14 11:00	01/20/14 09:35
500-70310-9	Ductile Treatment Fines	Solid	01/17/14 11:00	01/20/14 09:35
500-70310-10	Finishing System Fines	Solid	01/17/14 11:00	01/20/14 09:35

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

**Client Sample ID: Shot Blast Waste**

Date Collected: 01/17/14 11:00

Date Received: 01/20/14 09:35

**Lab Sample ID: 500-70310-1**

Matrix: Solid

### Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:24	1
Barium	<0.50		0.50		mg/L		01/22/14 08:30	01/22/14 17:24	1
Cadmium	<0.0050		0.0050		mg/L		01/22/14 08:30	01/22/14 17:24	1
Chromium	0.45		0.025		mg/L		01/22/14 08:30	01/22/14 17:24	1
Lead	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:24	1
Selenium	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:24	1
Silver	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 17:24	1

### Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		01/22/14 15:30	01/23/14 08:56	1

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

**Client Sample ID: Shell Core Spill & Sand Cores**

**Lab Sample ID: 500-70310-2**

Date Collected: 01/17/14 11:00

Matrix: Solid

Date Received: 01/20/14 09:35

### Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:29	1
Barium	<0.50		0.50		mg/L		01/22/14 08:30	01/22/14 17:29	1
Cadmium	<0.0050		0.0050		mg/L		01/22/14 08:30	01/22/14 17:29	1
Chromium	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 17:29	1
Lead	0.35		0.050		mg/L		01/22/14 08:30	01/22/14 17:29	1
Selenium	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:29	1
Silver	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 17:29	1

### Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		01/22/14 15:30	01/23/14 09:06	1

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

**Client Sample ID:** Cold Box Spill Sand w/Cores

**Lab Sample ID:** 500-70310-3

Date Collected: 01/17/14 11:00

Matrix: Solid

Date Received: 01/20/14 09:35

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:42	1
Barium	<0.50		0.50		mg/L		01/22/14 08:30	01/22/14 17:42	1
Cadmium	<0.0050		0.0050		mg/L		01/22/14 08:30	01/22/14 17:42	1
Chromium	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 17:42	1
Lead	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:42	1
Selenium	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:42	1
Silver	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 17:42	1

**Method: 7470A - Mercury (CVAA) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		01/22/14 15:30	01/23/14 09:08	1

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

Client Sample ID: Transfer & Pouring Slag

Lab Sample ID: 500-70310-4

Date Collected: 01/17/14 11:00

Matrix: Solid

Date Received: 01/20/14 09:35

### Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:47	1
Barium	550		50		mg/L		01/22/14 08:30	01/23/14 17:35	100
Cadmium	0.085		0.050		mg/L		01/22/14 08:30	01/23/14 11:19	10
Chromium	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 17:47	1
Lead	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:47	1
Selenium	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:47	1
Silver	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 17:47	1

### Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		01/22/14 15:30	01/23/14 09:10	1

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

**Client Sample ID:** Sand System DC Fines

Date Collected: 01/17/14 11:00

Date Received: 01/20/14 09:35

**Lab Sample ID:** 500-70310-5

Matrix: Solid

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:52	1
Barium	<0.50		0.50		mg/L		01/22/14 08:30	01/22/14 17:52	1
Cadmium	<0.0050		0.0050		mg/L		01/22/14 08:30	01/22/14 17:52	1
Chromium	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 17:52	1
Lead	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:52	1
Selenium	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:52	1
Silver	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 17:52	1

**Method: 7470A - Mercury (CVAA) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		01/22/14 15:30	01/23/14 09:12	1

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

**Client Sample ID: Melt System Fines**

**Lab Sample ID: 500-70310-6**

Date Collected: 01/17/14 11:00

Matrix: Solid

Date Received: 01/20/14 09:35

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:58	1
Barium	1.8		0.50		mg/L		01/22/14 08:30	01/22/14 17:58	1
Cadmium	0.050		0.0050		mg/L		01/22/14 08:30	01/22/14 17:58	1
Chromium	0.23		0.025		mg/L		01/22/14 08:30	01/22/14 17:58	1
Lead	0.19		0.050		mg/L		01/22/14 08:30	01/22/14 17:58	1
Selenium	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 17:58	1
Silver	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 17:58	1

**Method: 7470A - Mercury (CVAA) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		01/22/14 15:30	01/23/14 09:14	1

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

### Client Sample ID: Ladle Refractory

Date Collected: 01/17/14 11:00

Date Received: 01/20/14 09:35

### Lab Sample ID: 500-70310-7

Matrix: Solid

#### Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 18:03	1
Barium	3.7		0.50		mg/L		01/22/14 08:30	01/22/14 18:03	1
Cadmium	<0.0050		0.0050		mg/L		01/22/14 08:30	01/22/14 18:03	1
Chromium	0.050		0.025		mg/L		01/22/14 08:30	01/22/14 18:03	1
Lead	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 18:03	1
Selenium	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 18:03	1
Silver	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 18:03	1

#### Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		01/22/14 15:30	01/23/14 09:16	1

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

**Client Sample ID: Preheater Scalpings**

Date Collected: 01/17/14 11:00

Date Received: 01/20/14 09:35

**Lab Sample ID: 500-70310-8**

Matrix: Solid

### Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 18:08	1
Barium	0.89		0.50		mg/L		01/22/14 08:30	01/22/14 18:08	1
Cadmium	<0.0050		0.0050		mg/L		01/22/14 08:30	01/22/14 18:08	1
Chromium	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 18:08	1
Lead	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 18:08	1
Selenium	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 18:08	1
Silver	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 18:08	1

### Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		01/22/14 15:30	01/23/14 09:18	1

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

Client Sample ID: Ductile Treatment Fines

Lab Sample ID: 500-70310-9

Date Collected: 01/17/14 11:00

Matrix: Solid

Date Received: 01/20/14 09:35

### Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 18:12	1
Barium	1.4		0.50		mg/L		01/22/14 08:30	01/22/14 18:12	1
Cadmium	<0.0050		0.0050		mg/L		01/22/14 08:30	01/22/14 18:12	1
Chromium	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 18:12	1
Lead	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 18:12	1
Selenium	0.054		0.050		mg/L		01/22/14 08:30	01/22/14 18:12	1
Silver	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 18:12	1

### Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		01/22/14 15:30	01/23/14 09:20	1

## Client Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

**Client Sample ID: Finishing System Fines**

**Lab Sample ID: 500-70310-10**

Date Collected: 01/17/14 11:00

Matrix: Solid

Date Received: 01/20/14 09:35

### Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 18:18	1
Barium	<0.50		0.50		mg/L		01/22/14 08:30	01/22/14 18:18	1
Cadmium	<0.0050		0.0050		mg/L		01/22/14 08:30	01/22/14 18:18	1
Chromium	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 18:18	1
Lead	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 18:18	1
Selenium	<0.050		0.050		mg/L		01/22/14 08:30	01/22/14 18:18	1
Silver	<0.025		0.025		mg/L		01/22/14 08:30	01/22/14 18:18	1

### Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		01/22/14 15:30	01/23/14 09:21	1

TestAmerica Chicago

## Definitions/Glossary

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## QC Association Summary

Client: Rochester Metal Products Corp  
 Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

### Metals

#### Leach Batch: 220473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70310-1	Shot Blast Waste	TCLP	Solid	1311	
500-70310-1 DU	Shot Blast Waste	TCLP	Solid	1311	
500-70310-1 MS	Shot Blast Waste	TCLP	Solid	1311	
500-70310-2	Shell Core Spill & Sand Cores	TCLP	Solid	1311	
500-70310-3	Cold Box Spill Sand w/Cores	TCLP	Solid	1311	
500-70310-4	Transfer & Pouring Slag	TCLP	Solid	1311	
500-70310-5	Sand System DC Fines	TCLP	Solid	1311	
500-70310-7	Ladle Refractory	TCLP	Solid	1311	
500-70310-8	Preheater Scalpings	TCLP	Solid	1311	
500-70310-10	Finishing System Fines	TCLP	Solid	1311	
LB 500-220473/1-B	Method Blank	TCLP	Solid	1311	
LB 500-220473/1-C	Method Blank	TCLP	Solid	1311	

#### Leach Batch: 220475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70310-6	Melt System Fines	TCLP	Solid	1311	
500-70310-9	Ductile Treatment Fines	TCLP	Solid	1311	
LB2 500-220475/1-B	Method Blank	TCLP	Solid	1311	
LB2 500-220475/1-C	Method Blank	TCLP	Solid	1311	

#### Prep Batch: 220600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70310-1	Shot Blast Waste	TCLP	Solid	3010A	220473
500-70310-2	Shell Core Spill & Sand Cores	TCLP	Solid	3010A	220473
500-70310-3	Cold Box Spill Sand w/Cores	TCLP	Solid	3010A	220473
500-70310-4	Transfer & Pouring Slag	TCLP	Solid	3010A	220473
500-70310-5	Sand System DC Fines	TCLP	Solid	3010A	220473
500-70310-6	Melt System Fines	TCLP	Solid	3010A	220475
500-70310-7	Ladle Refractory	TCLP	Solid	3010A	220473
500-70310-8	Preheater Scalpings	TCLP	Solid	3010A	220473
500-70310-9	Ductile Treatment Fines	TCLP	Solid	3010A	220475
500-70310-10	Finishing System Fines	TCLP	Solid	3010A	220473
LB 500-220473/1-B	Method Blank	TCLP	Solid	3010A	220473
LB2 500-220475/1-B	Method Blank	TCLP	Solid	3010A	220475
LCS 500-220600/3-A	Lab Control Sample	Total/NA	Solid	3010A	

#### Prep Batch: 220662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70310-1	Shot Blast Waste	TCLP	Solid	7470A	220473
500-70310-1 DU	Shot Blast Waste	TCLP	Solid	7470A	220473
500-70310-1 MS	Shot Blast Waste	TCLP	Solid	7470A	220473
500-70310-2	Shell Core Spill & Sand Cores	TCLP	Solid	7470A	220473
500-70310-3	Cold Box Spill Sand w/Cores	TCLP	Solid	7470A	220473
500-70310-4	Transfer & Pouring Slag	TCLP	Solid	7470A	220473
500-70310-5	Sand System DC Fines	TCLP	Solid	7470A	220473
500-70310-6	Melt System Fines	TCLP	Solid	7470A	220475
500-70310-7	Ladle Refractory	TCLP	Solid	7470A	220473
500-70310-8	Preheater Scalpings	TCLP	Solid	7470A	220473
500-70310-9	Ductile Treatment Fines	TCLP	Solid	7470A	220475
500-70310-10	Finishing System Fines	TCLP	Solid	7470A	220473
LB 500-220473/1-C	Method Blank	TCLP	Solid	7470A	220473

TestAmerica Chicago

## QC Association Summary

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

### Metals (Continued)

#### Prep Batch: 220662 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB2 500-220475/1-C	Method Blank	TCLP	Solid	7470A	220475
LCS 500-220662/13-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 500-220662/12-A	Method Blank	Total/NA	Solid	7470A	

#### Analysis Batch: 220716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70310-1	Shot Blast Waste	TCLP	Solid	6010B	220600
500-70310-2	Shell Core Spill & Sand Cores	TCLP	Solid	6010B	220600
500-70310-3	Cold Box Spill Sand w/Cores	TCLP	Solid	6010B	220600
500-70310-4	Transfer & Pouring Slag	TCLP	Solid	6010B	220600
500-70310-5	Sand System DC Fines	TCLP	Solid	6010B	220600
500-70310-6	Melt System Fines	TCLP	Solid	6010B	220600
500-70310-7	Ladle Refractory	TCLP	Solid	6010B	220600
500-70310-8	Preheater Scalpings	TCLP	Solid	6010B	220600
500-70310-9	Ductile Treatment Fines	TCLP	Solid	6010B	220600
500-70310-10	Finishing System Fines	TCLP	Solid	6010B	220600
LB 500-220473/1-B	Method Blank	TCLP	Solid	6010B	220600
LB2 500-220475/1-B	Method Blank	TCLP	Solid	6010B	220600
LCS 500-220600/3-A	Lab Control Sample	Total/NA	Solid	6010B	220600

#### Analysis Batch: 220747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70310-1	Shot Blast Waste	TCLP	Solid	7470A	220662
500-70310-1 DU	Shot Blast Waste	TCLP	Solid	7470A	220662
500-70310-1 MS	Shot Blast Waste	TCLP	Solid	7470A	220662
500-70310-2	Shell Core Spill & Sand Cores	TCLP	Solid	7470A	220662
500-70310-3	Cold Box Spill Sand w/Cores	TCLP	Solid	7470A	220662
500-70310-4	Transfer & Pouring Slag	TCLP	Solid	7470A	220662
500-70310-5	Sand System DC Fines	TCLP	Solid	7470A	220662
500-70310-6	Melt System Fines	TCLP	Solid	7470A	220662
500-70310-7	Ladle Refractory	TCLP	Solid	7470A	220662
500-70310-8	Preheater Scalpings	TCLP	Solid	7470A	220662
500-70310-9	Ductile Treatment Fines	TCLP	Solid	7470A	220662
500-70310-10	Finishing System Fines	TCLP	Solid	7470A	220662
LB 500-220473/1-C	Method Blank	TCLP	Solid	7470A	220662
LB2 500-220475/1-C	Method Blank	TCLP	Solid	7470A	220662
LCS 500-220662/13-A	Lab Control Sample	Total/NA	Solid	7470A	220662
MB 500-220662/12-A	Method Blank	Total/NA	Solid	7470A	220662

#### Analysis Batch: 220783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70310-4	Transfer & Pouring Slag	TCLP	Solid	6010B	220600

#### Analysis Batch: 220858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70310-4	Transfer & Pouring Slag	TCLP	Solid	6010B	220600

TestAmerica Chicago

## QC Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

### Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-220600/3-A							Client Sample ID: Lab Control Sample			
							Prep Type: Total/NA			
							Prep Batch: 220600			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.			
Arsenic	0.100	0.0995		mg/L	99	80 - 120				
Barium	2.00	2.02		mg/L	101	80 - 120				
Cadmium	0.0500	0.0484		mg/L	97	80 - 120				
Chromium	0.200	0.196		mg/L	98	80 - 120				
Lead	0.100	0.0982		mg/L	98	80 - 120				
Selenium	0.100	0.0919		mg/L	92	80 - 120				
Silver	0.0500	0.0457		mg/L	91	80 - 120				

### Lab Sample ID: LB 500-220473/1-B

Lab Sample ID: LB 500-220473/1-B							Client Sample ID: Method Blank			
							Prep Type: TCLP			
							Prep Batch: 220600			
Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	REPROT#
Arsenic	<0.050		0.050	mg/L	01/22/14 08:30	01/22/14 16:45			1	
Barium	<0.50		0.50	mg/L	01/22/14 08:30	01/22/14 16:45			1	
Cadmium	<0.0050		0.0050	mg/L	01/22/14 08:30	01/22/14 16:45			1	
Chromium	<0.025		0.025	mg/L	01/22/14 08:30	01/22/14 16:45			1	
Lead	<0.050		0.050	mg/L	01/22/14 08:30	01/22/14 16:45			1	
Selenium	<0.050		0.050	mg/L	01/22/14 08:30	01/22/14 16:45			1	
Silver	<0.025		0.025	mg/L	01/22/14 08:30	01/22/14 16:45			1	

### Lab Sample ID: LB2 500-220475/1-B

Lab Sample ID: LB2 500-220475/1-B							Client Sample ID: Method Blank			
							Prep Type: TCLP			
							Prep Batch: 220600			
Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	REPROT#
Arsenic	<0.050		0.050	mg/L	01/22/14 08:30	01/22/14 16:50			1	
Barium	<0.50		0.50	mg/L	01/22/14 08:30	01/22/14 16:50			1	
Cadmium	<0.0050		0.0050	mg/L	01/22/14 08:30	01/22/14 16:50			1	
Chromium	<0.025		0.025	mg/L	01/22/14 08:30	01/22/14 16:50			1	
Lead	<0.050		0.050	mg/L	01/22/14 08:30	01/22/14 16:50			1	
Selenium	<0.050		0.050	mg/L	01/22/14 08:30	01/22/14 16:50			1	
Silver	<0.025		0.025	mg/L	01/22/14 08:30	01/22/14 16:50			1	

### Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-220662/12-A							Client Sample ID: Method Blank			
							Prep Type: Total/NA			
							Prep Batch: 220662			
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	REPROT#
Mercury	<0.00020		0.00020	mg/L	01/22/14 15:30	01/23/14 08:44			1	

### Lab Sample ID: LCS 500-220662/13-A

Lab Sample ID: LCS 500-220662/13-A							Client Sample ID: Lab Control Sample			
							Prep Type: Total/NA			
							Prep Batch: 220662			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.			
Mercury	0.00200	0.00216		mg/L	108	80 - 120				

TestAmerica Chicago

## QC Sample Results

Client: Rochester Metal Products Corp  
 Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

### Method: 7470A - Mercury (CVAA) (Continued)

**Lab Sample ID:** LB 500-220473/1-C

Matrix: Solid

Analysis Batch: 220747

Analyte	LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020		mg/L		01/22/14 15:30	01/23/14 08:52	1

**Lab Sample ID:** LB2 500-220475/1-C

Matrix: Solid

Analysis Batch: 220747

Analyte	LB2		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020		mg/L		01/22/14 15:30	01/23/14 08:54	1

**Lab Sample ID:** 500-70310-1 MS

Matrix: Solid

Analysis Batch: 220747

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Mercury	<0.00020		0.00100	0.00108		mg/L		108	50 - 150

**Lab Sample ID:** 500-70310-1 DU

Matrix: Solid

Analysis Batch: 220747

Analyte	Sample	Sample	DU	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier					
Mercury	<0.00020		<0.00020			mg/L		NC	20

TestAmerica Chicago

## Lab Chronicle

Client: Rochester Metal Products Corp  
Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

### Client Sample ID: Shot Blast Waste

Date Collected: 01/17/14 11:00

Date Received: 01/20/14 09:35

### Lab Sample ID: 500-70310-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	3010A			220600	01/22/14 08:30	MJP	TAL CHI
TCLP	Analysis	6010B		1	220716	01/22/14 17:24	PJ1	TAL CHI
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	7470A			220662	01/22/14 15:30	RLL	TAL CHI
TCLP	Analysis	7470A		1	220747	01/23/14 08:56	RLL	TAL CHI

### Client Sample ID: Shell Core Spill & Sand Cores

Date Collected: 01/17/14 11:00

Date Received: 01/20/14 09:35

### Lab Sample ID: 500-70310-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	3010A			220600	01/22/14 08:30	MJP	TAL CHI
TCLP	Analysis	6010B		1	220716	01/22/14 17:29	PJ1	TAL CHI
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	7470A			220662	01/22/14 15:30	RLL	TAL CHI
TCLP	Analysis	7470A		1	220747	01/23/14 09:06	RLL	TAL CHI

### Client Sample ID: Cold Box Spill Sand w/Cores

Date Collected: 01/17/14 11:00

Date Received: 01/20/14 09:35

### Lab Sample ID: 500-70310-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	3010A			220600	01/22/14 08:30	MJP	TAL CHI
TCLP	Analysis	6010B		1	220716	01/22/14 17:42	PJ1	TAL CHI
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	7470A			220662	01/22/14 15:30	RLL	TAL CHI
TCLP	Analysis	7470A		1	220747	01/23/14 09:08	RLL	TAL CHI

### Client Sample ID: Transfer & Pouring Slag

Date Collected: 01/17/14 11:00

Date Received: 01/20/14 09:35

### Lab Sample ID: 500-70310-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Prep	3010A			220600	01/22/14 08:30	MJP	TAL CHI
TCLP	Analysis	6010B		1	220716	01/22/14 17:47	PJ1	TAL CHI
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	7470A			220662	01/22/14 15:30	RLL	TAL CHI
TCLP	Analysis	7470A		1	220747	01/23/14 09:10	RLL	TAL CHI
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	3010A			220600	01/22/14 08:30	MJP	TAL CHI
TCLP	Analysis	6010B		10	220783	01/23/14 11:19	LEG	TAL CHI

TestAmerica Chicago

## Lab Chronicle

Client: Rochester Metal Products Corp  
 Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

### Client Sample ID: Transfer & Pouring Slag

Date Collected: 01/17/14 11:00

Date Received: 01/20/14 09:35

### Lab Sample ID: 500-70310-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Analysis	6010B		100	220858	01/23/14 17:35	PJ1	TAL CHI

### Client Sample ID: Sand System DC Fines

Date Collected: 01/17/14 11:00

Date Received: 01/20/14 09:35

### Lab Sample ID: 500-70310-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	3010A			220600	01/22/14 08:30	MJP	TAL CHI
TCLP	Analysis	6010B		1	220716	01/22/14 17:52	PJ1	TAL CHI
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	7470A			220662	01/22/14 15:30	RLL	TAL CHI
TCLP	Analysis	7470A		1	220747	01/23/14 09:12	RLL	TAL CHI

### Client Sample ID: Melt System Fines

Date Collected: 01/17/14 11:00

Date Received: 01/20/14 09:35

### Lab Sample ID: 500-70310-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	3010A			220600	01/22/14 08:30	MJP	TAL CHI
TCLP	Analysis	6010B		1	220716	01/22/14 17:58	PJ1	TAL CHI
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	7470A			220662	01/22/14 15:30	RLL	TAL CHI
TCLP	Analysis	7470A		1	220747	01/23/14 09:14	RLL	TAL CHI

### Client Sample ID: Ladle Refractory

Date Collected: 01/17/14 11:00

Date Received: 01/20/14 09:35

### Lab Sample ID: 500-70310-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	3010A			220600	01/22/14 08:30	MJP	TAL CHI
TCLP	Analysis	6010B		1	220716	01/22/14 18:03	PJ1	TAL CHI
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	7470A			220662	01/22/14 15:30	RLL	TAL CHI
TCLP	Analysis	7470A		1	220747	01/23/14 09:16	RLL	TAL CHI

TestAmerica Chicago

## Lab Chronicle

Client: Rochester Metal Products Corp  
 Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

### Client Sample ID: Preheater Scalpings

Date Collected: 01/17/14 11:00  
 Date Received: 01/20/14 09:35

Lab Sample ID: 500-70310-8

Matrix: Solid

Prep Type	Batch	Batch	Run	Dilution Factor	Batch	Prepared		Lab
	Type	Method			Number	or Analyzed	Analyst	
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	3010A			220600	01/22/14 08:30	MJP	TAL CHI
TCLP	Analysis	6010B		1	220716	01/22/14 18:08	PJ1	TAL CHI
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	7470A			220662	01/22/14 15:30	RLL	TAL CHI
TCLP	Analysis	7470A		1	220747	01/23/14 09:18	RLL	TAL CHI

### Client Sample ID: Ductile Treatment Fines

Date Collected: 01/17/14 11:00  
 Date Received: 01/20/14 09:35

Lab Sample ID: 500-70310-9

Matrix: Solid

Prep Type	Batch	Batch	Run	Dilution Factor	Batch	Prepared		Lab
	Type	Method			Number	or Analyzed	Analyst	
TCLP	Leach	1311			220475	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	3010A			220600	01/22/14 08:30	MJP	TAL CHI
TCLP	Analysis	6010B		1	220716	01/22/14 18:12	PJ1	TAL CHI
TCLP	Leach	1311			220475	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	7470A			220662	01/22/14 15:30	RLL	TAL CHI
TCLP	Analysis	7470A		1	220747	01/23/14 09:20	RLL	TAL CHI

### Client Sample ID: Finishing System Fines

Date Collected: 01/17/14 11:00  
 Date Received: 01/20/14 09:35

Lab Sample ID: 500-70310-10

Matrix: Solid

Prep Type	Batch	Batch	Run	Dilution Factor	Batch	Prepared		Lab
	Type	Method			Number	or Analyzed	Analyst	
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	3010A			220600	01/22/14 08:30	MJP	TAL CHI
TCLP	Analysis	6010B		1	220716	01/22/14 18:18	PJ1	TAL CHI
TCLP	Leach	1311			220473	01/21/14 12:45	CMV	TAL CHI
TCLP	Prep	7470A			220662	01/22/14 15:30	RLL	TAL CHI
TCLP	Analysis	7470A		1	220747	01/23/14 09:21	RLL	TAL CHI

#### Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TestAmerica Chicago

## Certification Summary

Client: Rochester Metal Products Corp

Project/Site: Solid Waste Analysis

TestAmerica Job ID: 500-70310-1

### Laboratory: TestAmerica Chicago

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	04-30-14
California	NELAP	9	01132CA	04-30-14
Georgia	State Program	4	N/A	04-30-14
Hawaii	State Program	9	N/A	04-30-14
Illinois	NELAP	5	100201	04-30-14
Indiana	State Program	5	C-IL-02	04-30-14
Iowa	State Program	7	82	05-01-14
Kansas	NELAP	7	E-10161	10-31-14
Kentucky (UST)	State Program	4	66	04-30-14
Louisiana	NELAP	6	30720	06-30-14
Massachusetts	State Program	1	M-IL035	06-30-14
Mississippi	State Program	4	N/A	04-30-14
North Carolina DENR	State Program	4	291	12-31-14
North Dakota	State Program	8	R-194	04-30-14
Oklahoma	State Program	6	8908	08-31-14
South Carolina	State Program	4	77001	04-30-14
Texas	NELAP	6	T104704252-09-TX	02-28-14
USDA	Federal		P330-12-00038	02-06-15
Wisconsin	State Program	5	999580010	08-31-14
Wyoming	State Program	8	8TMS-Q	04-30-14

TestAmerica Chicago

# TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 6  
Phone: 708.594.5200 Fax: 708.59



500-70310 COC

(optional)  
 Report To: Kayla Criswell  
 Contact: \_\_\_\_\_  
 Company: Rochester Metal Products  
 Address: Colle Indiana Avenue  
 Address: PO Box 488 Rochester, IN 46975  
 Phone: 574-223-0461  
 Fax: 574-223-2820  
 E-Mail: Kayla.Criswell@rochestermetals.com

(optional)  
 Bill To: Same  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO# Reference#: \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-70310

Chain of Custody Number: \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: Unchilled

- Preservative Key  
 1. HCl, Cool to 4°  
 2. H2SO4, Cool to 4°  
 3. HNO3, Cool to 4°  
 4. NaOH, Cool to 4°  
 5. NaOH/Zn, Cool to 4°  
 6. NaHSO4  
 7. Cool to 4°  
 8. None  
 9. Other

Comments

Lab ID	MS/SDS	Sample ID	Sampling		# of Containers	Matrix	A	TCU	Extraction	TCP Metals									
			Date	Time															
1		Shot Blast Waste	1/17/14	11:00 AM	S	X			X										
2		Shell Core Spill & Sand Cores	1/17/14	11:00 AM	S	X			X										
3		Cold Box Spill Sand w/Cores	1/17/14	11:00 AM	S	X			X										
4		Transfer & Pouring Slag	1/17/14	11:00 AM	S	X			X										
5		Sand System DC Fines	1/17/14	11:00 AM	S	X			X										
6		Melt System Fines	1/17/14	11:00 AM	S	X			X										
7		Ladle Refractory	1/17/14	11:00 AM	S	X			X										
8		Preheater Scalpings	1/17/14	11:00 AM	S	X			X										
9		Ductile Treatment Fines	1/17/14	11:00 AM	S	X			X										
10		Finishing System Fines	1/17/14	11:00 AM	S	X			X										

Turnaround Time Required (Business Days)

1 Day    2 Days    5 Days    7 Days    X 10 Days    15 Days    Other \_\_\_\_\_

Requested Due Date \_\_\_\_\_

Sample Disposal

Return to Client     Disposal by Lab     Archive for \_\_\_\_\_ Months    (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>Kayla Criswell</u>	Company <u>RMP</u>	Date <u>1/17/14</u>	Time <u>3:00 PM</u>	Received By <u>Shawn Scotts TA-CR</u>	Company <u>TA-CR</u>	Date <u>1/20/14</u>	Time <u>0935</u>	Lab Courier _____
Relinquished By _____	Company _____	Date _____	Time _____	Received By _____	Company _____	Date _____	Time _____	Shipped _____
Relinquished By _____	Company _____	Date _____	Time _____	Received By _____	Company _____	Date _____	Time _____	Hand Delivered _____

Matrix Key  
 WW - Wastewater  
 W - Water  
 S - Soil  
 SL - Sludge  
 MS - Miscellaneous  
 OL - Oil  
 A - Air  
 SE - Sediment  
 SO - Soll  
 L - Leachate  
 WI - Wipe  
 DW - Drinking Water  
 O - Other

Client Comments

Level II QC/QA

Lab Comments:

## Login Sample Receipt Checklist

Client: Rochester Metal Products Corp

Job Number: 500-70310-1

Login Number: 70310

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	Unchilled
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## **Attachment 5**

### **Analytical Report for TestAmerica Job ID: 500-70738-1 Transfer & Pouring Slag**



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

TestAmerica Job ID: 500-70738-1  
Client Project/Site: Transferring & Pouring Slag  
Revision: 1

For:  
Rochester Metal Products Corp  
616 Indiana Ave  
Rochester, Indiana 46975

Attn: Kayla Criswell

*Robin M Kintz*

---

Authorized for release by:  
2/19/2014 9:42:28 AM  
Robin Kintz, Project Manager II  
(708)534-5200  
robinm.kintz@testamericainc.com

### LINKS

Review your project  
results through

**Total Access**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NEI/AC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



## Table of Contents

Cover Page . . . . .	1
Table of Coritents . . . . .	2
Case Narrative . . . . .	3
Method Summary . . . . .	4
Sample Summary . . . . .	5
Client Sample Results . . . . .	6
Definitions . . . . .	7
QC Association . . . . .	8
QC Sample Results . . . . .	9
Chronicle . . . . .	11
Certification Summary . . . . .	12
Chain of Custody . . . . .	13
Receipt Checklists . . . . .	14

## Case Narrative

Client: Rochester Metal Products Corp  
Project/Site: Transferring & Pouring Slag

TestAmerica Job ID: 500-70738-1

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Job ID: 500-70738-1

Laboratory: TestAmerica Chicago

**Narrative**

Job Narrative  
500-70738-1

**Comments**

No additional comments.

**Receipt**

The sample was received on 1/29/2014 10:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice.

**Except:**

Client needed the full RCRA metals for this event, but only originally requested cadmium and barium.

**Metals**

Method(s) 6010C: The CCVL, following these samples: 500-70738-1, 500-70740-1 and 500-70741-1, was outside acceptance limits for Pb and As. The Pb was outside the upper limits and all the samples were below the RL. The As was slightly outside acceptance limits at 69% rec. The CRI (2x the RL) run after the CCVL was within acceptance limits. The samples were reported for As and Pb.

Method(s) 6010C: The leach blank for batch 221390 contained chromium above the reporting limit (RL). The following samples were extracted with that blank and were reported with a "B" flag: Transferring & Pouring Slag (500-70738-1).

No other analytical or quality issues were noted.

---

Job ID: 500-70738-2

Laboratory: TestAmerica Chicago

**Narrative**

Job Narrative  
500-70738-2

**Comments**

No additional comments.

**Receipt**

The sample was received on 1/29/2014 10:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice.

**Metals**

No analytical or quality issues were noted.

## Method Summary

Client: Rochester Metal Products Corp  
Project/Site: Transferring & Pouring Slag

TestAmerica Job ID: 500-70738-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

## Sample Summary

Client: Rochester Metal Products Corp  
Project/Site: Transferring & Pouring Slag

TestAmerica Job ID: 500-70738-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-70738-1	Transferring & Pouring Slag	Solid	01/27/14 11:00	01/29/14 10:00

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Transferring & Pouring Slag

TestAmerica Job ID: 500-70738-1

**Client Sample ID: Transferring & Pouring Slag**

**Lab Sample ID: 500-70738-1**

Date Collected: 01/27/14 11:00

Matrix: Solid

Date Received: 01/29/14 10:00

**Method: 6010C - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050	A	0.050		mg/L		01/31/14 09:00	01/31/14 18:30	1
Barium	<0.50		0.50		mg/L		01/31/14 09:00	01/31/14 18:30	1
Cadmium	<0.0050		0.0050		mg/L		01/31/14 09:00	01/31/14 18:30	1
Chromium	0.21	B	0.025		mg/L		01/31/14 09:00	01/31/14 18:30	1
Lead	<0.050	A	0.050		mg/L		01/31/14 09:00	01/31/14 18:30	1
Selenium	<0.050		0.050		mg/L		01/31/14 09:00	01/31/14 18:30	1
Silver	<0.025		0.025		mg/L		01/31/14 09:00	01/31/14 18:30	1

**Method: 7470A - Mercury (CVAA) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/17/14 07:45	02/17/14 13:01	1

TestAmerica Chicago

## Definitions/Glossary

Client: Rochester Metal Products Corp  
Project/Site: Transferring & Pouring Slag

TestAmerica Job ID: 500-70738-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
A	ICV,CCV,JCB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: instrument related QC exceeds the control limits.
B	Compound was found in the blank and sample.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## QC Association Summary

Client: Rochester Metal Products Corp  
 Project/Site: Transferring & Pouring Slag

TestAmerica Job ID: 500-70738-1

### Metals

#### Leach Batch: 221390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70738-1	Transferring & Pouring Slag	TCLP	Solid	1311	
500-70738-1 DU	Transferring & Pouring Slag	TCLP	Solid	1311	
500-70738-1 MS	Transferring & Pouring Slag	TCLP	Solid	1311	
LB 500-221390/1-B	Method Blank	TCLP	Solid	1311	
LB 500-221390/1-D	Method Blank	TCLP	Solid	1311	

#### Prep Batch: 221638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70738-1	Transferring & Pouring Slag	TCLP	Solid	3010A	221390
500-70738-1 DU	Transferring & Pouring Slag	TCLP	Solid	3010A	221390
500-70738-1 MS	Transferring & Pouring Slag	TCLP	Solid	3010A	221390
LB 500-221390/1-B	Method Blank	TCLP	Solid	3010A	221390
LCS 500-221638/2-A	Lab Control Sample	Total/NA	Solid	3010A	

#### Analysis Batch: 221800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70738-1	Transferring & Pouring Slag	TCLP	Solid	6010C	221638
500-70738-1 DU	Transferring & Pouring Slag	TCLP	Solid	6010C	221638
500-70738-1 MS	Transferring & Pouring Slag	TCLP	Solid	6010C	221638
LB 500-221390/1-B	Method Blank	TCLP	Solid	6010C	221638
LCS 500-221638/2-A	Lab Control Sample	Total/NA	Solid	6010C	221638

#### Prep Batch: 223495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70738-1	Transferring & Pouring Slag	TCLP	Solid	7470A	221390
LB 500-221390/1-D	Method Blank	TCLP	Solid	7470A	221390
LCS 500-223495/13-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 500-223495/12-A	Method Blank	Total/NA	Solid	7470A	

#### Analysis Batch: 223594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70738-1	Transferring & Pouring Slag	TCLP	Solid	7470A	223495
LB 500-221390/1-D	Method Blank	TCLP	Solid	7470A	223495
LCS 500-223495/13-A	Lab Control Sample	Total/NA	Solid	7470A	223495
MB 500-223495/12-A	Method Blank	Total/NA	Solid	7470A	223495

## QC Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Transferring & Pouring Slag

TestAmerica Job ID: 500-70738-1

### Method: 6010C - Metals (ICP)

Lab Sample ID: LCS 500-221638/2-A

Matrix: Solid

Analysis Batch: 221800

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 221638

Analyte	Spike	LCS		Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Arsenic	0.100	0.0925	A	mg/L	92	80 - 120	
Barium	2.00	2.02		mg/L	101	80 - 120	
Cadmium	0.0500	0.0486		mg/L	97	80 - 120	
Chromium	0.200	0.197		mg/L	98	80 - 120	
Lead	0.100	0.102	A	mg/L	102	80 - 120	
Selenium	0.100	0.0880		mg/L	88	80 - 120	
Silver	0.0500	0.0485		mg/L	97	80 - 120	

Lab Sample ID: LB 500-221390/1-B

Matrix: Solid

Analysis Batch: 221800

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 221638

Analyte	LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.050	A	0.050	mg/L	01/31/14 09:00	01/31/14 18:21			1
Barium	<0.50		0.50	mg/L	01/31/14 09:00	01/31/14 18:21			1
Cadmium	<0.0050		0.0050	mg/L	01/31/14 09:00	01/31/14 18:21			1
Chromium	0.0471		0.025	mg/L	01/31/14 09:00	01/31/14 18:21			1
Lead	<0.050	A	0.050	mg/L	01/31/14 09:00	01/31/14 18:21			1
Selenium	<0.050		0.050	mg/L	01/31/14 09:00	01/31/14 18:21			1
Silver	<0.025		0.025	mg/L	01/31/14 09:00	01/31/14 18:21			1

Lab Sample ID: 500-70738-1 MS

Matrix: Solid

Analysis Batch: 221800

Client Sample ID: Transferring & Pouring Slag

Prep Type: TCLP

Prep Batch: 221638

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Arsenic	<0.050	A	0.100	0.107	A	mg/L	107	50 - 150	
Barium	<0.50		2.00	2.32		mg/L	97	50 - 150	
Cadmium	<0.0050		0.0500	0.0505		mg/L	101	50 - 150	
Chromium	0.21	B	0.200	0.398		mg/L	94	50 - 150	
Lead	<0.050	A	0.100	0.110	A	mg/L	96	50 - 150	
Selenium	<0.050		0.100	0.119		mg/L	100	50 - 150	
Silver	<0.025		0.0500	0.0552		mg/L	110	50 - 150	

Lab Sample ID: 500-70738-1 DU

Matrix: Solid

Analysis Batch: 221800

Client Sample ID: Transferring & Pouring Slag

Prep Type: TCLP

Prep Batch: 221638

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Arsenic	<0.050	A	<0.050		mg/L		NC	20
Barium	<0.50		<0.50		mg/L		NC	20
Cadmium	<0.0050		<0.0050		mg/L		NC	20
Chromium	0.21	B	0.216		mg/L		3	20
Lead	<0.050	A	<0.050		mg/L		NC	20
Selenium	<0.050		<0.050		mg/L		NC	20
Silver	<0.025		<0.025		mg/L		NC	20

TestAmerica Chicago

## QC Sample Results

Client: Rochester Metal Products Corp  
 Project/Site: Transferring & Pouring Slag

TestAmerica Job ID: 500-70738-1

### Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-223495/12-A

Matrix: Solid

Analysis Batch: 223594

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 223495

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury			<0.00020		0.00020		mg/L		02/17/14 07:45	02/17/14 12:55	1

Lab Sample ID: LCS 500-223495/13-A

Matrix: Solid

Analysis Batch: 223594

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 223495

Analyte	Spike	LCS	LCS	%Rec.			
	Added	Result	Qualifier	Unit	D	%Rec.	Limits
Mercury		0.00200		0.00218	mg/L	109	80 - 120

Lab Sample ID: LB 500-221390/1-D

Matrix: Solid

Analysis Batch: 223594

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 223495

Analyte	LB	LB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury			<0.00020		0.00020		mg/L		02/17/14 07:45	02/17/14 12:58	1

TestAmerica Chicago

## Lab Chronicle

Client: Rochester Metal Products Corp  
Project/Site: Transferring & Pouring Slag

TestAmerica Job ID: 500-70738-1

Client Sample ID: Transferring & Pouring Slag

Lab Sample ID: 500-70738-1

Date Collected: 01/27/14 11:00

Matrix: Solid

Date Received: 01/29/14 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			221390	01/29/14 13:45	CMV	TAL CHI
TCLP	Prep	3010A			221638	01/31/14 09:00	LA1	TAL CHI
TCLP	Analysis	6010C		1	221800	01/31/14 18:30	PJ1	TAL CHI
TCLP	Leach	1311			221390	01/29/14 13:45	CMV	TAL CHI
TCLP	Prep	7470A			223495	02/17/14 07:45	RLL	TAL CHI
TCLP	Analysis	7470A		1	223594	02/17/14 13:01	RLL	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

## Certification Summary

Client: Rochester Metal Products Corp  
Project/Site: Transferring & Pouring Slag

TestAmerica Job ID: 500-70738-1

### Laboratory: TestAmerica Chicago

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	04-30-14
California	NELAP	9	01132CA	04-30-14 *
Georgia	State Program	4	N/A	04-30-14
Hawaii	State Program	9	N/A	04-30-14
Illinois	NELAP	5	100201	04-30-14
Indiana	State Program	5	C-IL-02	04-30-14 *
Iowa	State Program	7	82	05-01-14 *
Kansas	NELAP	7	E-10161	10-31-14
Kentucky (UST)	State Program	4	66	04-30-14
Louisiana	NELAP	6	30720	06-30-14
Massachusetts	State Program	1	M-IL035	06-30-14
Mississippi	State Program	4	N/A	04-30-14
North Carolina DENR	State Program	4	291	12-31-14
North Dakota	State Program	8	R-194	04-30-14
Oklahoma	State Program	6	8908	08-31-14
South Carolina	State Program	4	77001	04-30-14
Texas	NELAP	6	T104704252-09-TX	02-28-14
USDA	Federal		P330-12-00038	02-06-15
Wisconsin	State Program	5	999580010	08-31-14
Wyoming	State Program	8	8TMS-Q	04-30-14

\* Expired certification is currently pending renewal and is considered valid.



500-70738 COC

**America**  
 THE LEADER IN ENVIRONMENTAL TESTING

## CHAIN OF CUSTODY RECORD

500-70738

Customer Information		Project Information		Sampling Methods																				
PO:		Project Name:	Transferring & Pouring Slag	A	TCLP Extraction	K																		
WO:		Lab Number:		B	TCLP Barium	L																		
Company:	Rochester Metal Products Corp	Bill To:	Same	C	TCLP Cadmium	M																		
Report to:	Kayla Criswell	Invoice ATTN:		D		N																		
Address:	616 Indiana Ave P.O.Box 488 Rochester, IN 46975-0488	Address:		E		O																		
				F	P																			
				G	Q																			
				H	R																			
Phone:	574-223-0461	Phone:	Same	I			Other:																	
Fax:	574-223-2326	Fax:		J																				

SAMPLE INFORMATION																									
No.	Sample Description	Preservation	Date	Time	Type	Matrix	# Container	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1.	Transferring & Pouring Slag	None	1/27/2014	11:00	Grab	Solid		X	X	X															
2.																									
3.																									
4.																									
5.																									
6.																									
7.																									
8.																									
9.																									
10.																									

Sampler: Kayla Criswell		Shipment Method:		UPS		Required Turnaround: 2 Days																	
1. Relinquished by: K. Criswell	Date: 1/27/2014	2. Received by: <i>Thewald</i>	Date: <i>1/29/14</i>	3. Relinquished by:	Date:	4. Received by:	Date:																
Company: Rochester Metal Product	Time: 3:00 PM	Company: <i>TA-CFT</i>	Time: <i>10:00</i>	Company:	Time:	Company:	Time:																

Comments:  Level II QC/QA													
---------------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--

Test America

2417 Bond Street

University Park, IL

Phone: 708.746.0057

Fax: 708.534.5211

## Login Sample Receipt Checklist

Client: Rochester Metal Products Corp

Job Number: 500-70738-1

Login Number: 70738

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	Unchilled
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## **Attachment 6**

### **Analytical Report for TestAmerica Job ID: 500-70740-1 Ajax Side Floor Slag**



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

TestAmerica Job ID: 500-70740-1

Client Project/Site: Ajax Side Floor Slag  
Revision: 1

For:  
Rochester Metal Products Corp  
616 Indiana Ave  
Rochester, Indiana 46975

Attn: Kayla Criswell



Authorized for release by:  
2/19/2014 9:44:06 AM

Robin Kintz, Project Manager II  
(708)534-5200  
[robin.m.kintz@testamericainc.com](mailto:robin.m.kintz@testamericainc.com)

### LINKS

Review your project  
results through

**Total Access**

Have a Question?

Ask  
The  
Expert

Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters; exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



## Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Method Summary . . . . .	4
Sample Summary . . . . .	5
Client Sample Results . . . . .	6
Definitions . . . . .	7
QC Association . . . . .	8
QC Sample Results . . . . .	9
Chronicle . . . . .	10
Certification Summary . . . . .	11
Chain of Custody . . . . .	12
Receipt Checklists . . . . .	13

## Case Narrative

Client: Rochester Metal Products Corp  
Project/Site: Ajax Side Floor Slag

TestAmerica Job ID: 500-70740-1

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**Job ID:** 500-70740-1

**Laboratory:** TestAmerica Chicago

**Narrative**

**Job Narrative**  
500-70740-1

**Comments**

No additional comments.

**Receipt**

The sample was received on 1/29/2014 10:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice.

Except:

Client needed the full RCRA metals for this event, but only originally requested cadmium and barium.

**Metals**

Method(s) 6010C: The CCVL, following these samples: 500-70738-1, 500-70740-1 and 500-70741-1, was outside acceptance limits for Pb and As. The Pb was outside the upper limits and all the samples were below the RL. The As was slightly outside acceptance limits at 69%rec. The CRI (2x the RL) run after the CCVL was within acceptance limits. The samples were reported for As and Pb.

Method(s) 6010C: The leach blank for batch 221390 contained chromium above the reporting limit (RL). The following samples were extracted with that blank and were reported with a "B" flag: Ajax Side Floor Slag (500-70740-1).

No other analytical or quality issues were noted.

---

**Job ID:** 500-70740-2

**Laboratory:** TestAmerica Chicago

**Narrative**

**Job Narrative**  
500-70740-2

**Comments**

No additional comments.

**Receipt**

The sample was received on 1/29/2014 10:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice.

**Metals**

No analytical or quality issues were noted.

## Method Summary

Client: Rochester Metal Products Corp  
Project/Site: Ajax Side Floor Slag

TestAmerica Job ID: 500-70740-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



## Sample Summary

Client: Rochester Metal Products Corp  
Project/Site: Ajax Side Floor Slag

TestAmerica Job ID: 500-70740-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-70740-1	Ajax Side Floor Slag	Solid	01/27/14 11:00	01/29/14 10:00

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
 Project/Site: Ajax Side Floor Slag

TestAmerica Job ID: 500-70740-1

**Client Sample ID: Ajax Side Floor Slag**

**Lab Sample ID: 500-70740-1**

Date Collected: 01/27/14 11:00

Matrix: Solid

Date Received: 01/28/14 10:00

**Method: 6010C - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050	^	0.050		mg/L		01/31/14 09:00	01/31/14 18:50	1
Barium	<0.50		0.50		mg/L		01/31/14 09:00	01/31/14 18:50	1
Cadmium	<0.0050		0.0050		mg/L		01/31/14 09:00	01/31/14 18:50	1
Chromium	0.13	B	0.025		mg/L		01/31/14 09:00	01/31/14 18:50	1
Lead	<0.050	^	0.050		mg/L		01/31/14 09:00	01/31/14 18:50	1
Selenium	<0.050		0.050		mg/L		01/31/14 09:00	01/31/14 18:50	1
Silver	<0.025		0.025		mg/L		01/31/14 09:00	01/31/14 18:50	1

**Method: 7470A - Mercury (CVAA) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/17/14 07:45	02/17/14 13:03	1

TestAmerica Chicago

## Definitions/Glossary

Client: Rochester Metal Products Corp  
Project/Site: Ajax Side Floor Slag

TestAmerica Job ID: 500-70740-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
A	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard. Instrument related QC exceeds the control limits.
B	Compound was found in the blank and sample.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## QC Association Summary

Client: Rochester Metal Products Corp  
 Project/Site: Ajax Side Floor Slag

TestAmerica Job ID: 500-70740-1

### Metals

#### Leach Batch: 221390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70740-1	Ajax Side Floor Slag	TCLP	Solid	1311	
LB 500-221390/1-B	Method Blank	TCLP	Solid	1311	
LB 500-221390/1-D	Method Blank	TCLP	Solid	1311	

#### Prep Batch: 221638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70740-1	Ajax Side Floor Slag	TCLP	Solid	3010A	221390
LB 500-221390/1-B	Method Blank	TCLP	Solid	3010A	221390
LCS 500-221638/2-A	Lab Control Sample	Total/NA	Solid	3010A	

#### Analysis Batch: 221800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70740-1	Ajax Side Floor Slag	TCLP	Solid	6010C	221638
LB 500-221390/1-B	Method Blank	TCLP	Solid	6010C	221638
LCS 500-221638/2-A	Lab Control Sample	Total/NA	Solid	6010C	221638

#### Prep Batch: 223495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70740-1	Ajax Side Floor Slag	TCLP	Solid	7470A	221390
LB 500-221390/1-D	Method Blank	TCLP	Solid	7470A	221390
LCS 500-223495/13-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 500-223495/12-A	Method Blank	Total/NA	Solid	7470A	

#### Analysis Batch: 223594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70740-1	Ajax Side Floor Slag	TCLP	Solid	7470A	223495
LB 500-221390/1-D	Method Blank	TCLP	Solid	7470A	223495
LCS 500-223495/13-A	Lab Control Sample	Total/NA	Solid	7470A	223495
MB 500-223495/12-A	Method Blank	Total/NA	Solid	7470A	223495

## QC Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Ajax Side Floor Slag

TestAmerica Job ID: 500-70740-1

### Method: 6010C - Metals (ICP)

Lab Sample ID: LCS 500-221638/2-A

Matrix: Solid

Analysis Batch: 221800

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 221638

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Arsenic	0.100	0.0925	^	mg/L	92	80 - 120	
Barium	2.00	2.02		mg/L	101	80 - 120	
Cadmium	0.0500	0.0486		mg/L	97	80 - 120	
Chromium	0.200	0.197		mg/L	98	80 - 120	
Lead	0.100	0.102	^	mg/L	102	80 - 120	
Selenium	0.100	0.0880		mg/L	88	80 - 120	
Silver	0.0500	0.0485		mg/L	97	80 - 120	

Lab Sample ID: LB 500-221390/1-B

Matrix: Solid

Analysis Batch: 221800

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 221638

Analyte	LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.050	^	0.050	mg/L	01/31/14 09:00	01/31/14 18:21			1
Barium	<0.50		0.50	mg/L	01/31/14 09:00	01/31/14 18:21			1
Cadmium	<0.0050		0.0050	mg/L	01/31/14 09:00	01/31/14 18:21			1
Chromium	0.0471		0.025	mg/L	01/31/14 09:00	01/31/14 18:21			1
Lead	<0.050	^	0.050	mg/L	01/31/14 09:00	01/31/14 18:21			1
Selenium	<0.050		0.050	mg/L	01/31/14 09:00	01/31/14 18:21			1
Silver	<0.025		0.025	mg/L	01/31/14 09:00	01/31/14 18:21			1

### Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-223495/12-A

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 223495

Matrix: Solid

Analysis Batch: 223594

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	mg/L	02/17/14 07:45	02/17/14 12:55			1

Lab Sample ID: LCS 500-223495/13-A

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 223495

Matrix: Solid

Analysis Batch: 223594

Analyte	Spike		Result	Qualifier	Unit	D	%Rec	Limits
	Added							
Mercury	0.00200		0.00218		mg/L	109	80 - 120	

Lab Sample ID: LB 500-221390/1-D

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 223495

Matrix: Sodid

Analysis Batch: 223594

Analyte	LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	mg/L	02/17/14 07:45	02/17/14 12:58			1

TestAmerica Chicago

## Lab Chronicle

Client: Rochester Metal Products Corp  
Project/Site: Ajax Side Floor Slag

TestAmerica Job ID: 500-70740-1

Client Sample ID: Ajax Side Floor Slag

Lab Sample ID: 500-70740-1

Date Collected: 01/27/14 11:00

Matrix: Solid

Date Received: 01/29/14 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			221390	01/29/14 13:45	CMV	TAL CHI
TCLP	Prep	3010A			221638	01/31/14 09:00	LA1	TAL CHI
TCLP	Analysis	6010C		1	221800	01/31/14 18:50	PJ1	TAL CHI
TCLP	Leach	1311			221390	01/29/14 13:45	CMV	TAL CHI
TCLP	Prep	7470A			223495	02/17/14 07:45	RLL	TAL CHI
TCLP	Analysis	7470A		1	223594	02/17/14 13:03	RLL	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TestAmerica Chicago

## Certification Summary

Client: Rochester Metal Products Corp  
Project/Site: Ajax Side Floor Slag

TestAmerica Job ID: 500-70740-1

### Laboratory: TestAmerica Chicago

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	04-30-14
California	NELAP	9	01132CA	04-30-14 *
Georgia	State Program	4	N/A	04-30-14
Hawaii	State Program	9	N/A	04-30-14
Illinois	NELAP	5	100201	04-30-14
Indiana	State Program	5	C-IL-02	04-30-14 *
Iowa	State Program	7	82	05-01-14 *
Kansas	NELAP	7	E-10161	10-31-14
Kentucky (UST)	State Program	4	66	04-30-14
Louisiana	NELAP	6	30720	06-30-14
Massachusetts	State Program	1	M-IL035	06-30-14
Mississippi	State Program	4	N/A	04-30-14
North Carolina DENR	State Program	4	291	12-31-14
North Dakota	State Program	8	R-194	04-30-14
Oklahoma	State Program	6	8908	08-31-14
South Carolina	State Program	4	77001	04-30-14
Texas	NELAP	6	T104704252-09-TX	02-28-14
USDA	Federal		P330-12-00038	02-06-15
Wisconsin	State Program	5	999580010	08-31-14
Wyoming	State Program	8	8TMS-Q	04-30-14

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Chicago



## CHAIN OF CUSTODY RECORD

500-70740

Customer Information		Project Information		Analysis/Methode														
PO:		Project Name:	Ajax Side Floor Slag	A	TCLP Extraction	K												
WO:		Lab Number:		B	TCLP Barium	L												
Company:	Rochester Metal Products Corp	Bill To:	Same	C	TCLP Cadmium	M												
Report to:	Kayla Criswell	Invoice ATTN:		D		N												
Address:	616 Indiana Ave P.O.Box 488 Rochester, IN 46975-0488	Address:		E		O												
				F		P												
				G		Q												
				H		R												
Phone:	574-223-0461	Phone:	Same	I		Other:												
Fax:	574-223-2326	Fax:		J														

No.	Sample Description	Preservation	SAMPLE INFORMATION		Matrix	# Container	Analysis/Methode															
			Date	Time			Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Ajax Side Floor Slag	None	1/27/2014	11:00	Grab	Solid	X	X	X													
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
Sampler: Kayla Criswell			Shipment Method: UPS				Required Turnaround: 1 Days															
1. Relinquished by: K. Criswell	Date: 1/27/2014	2. Received by: <i>Shawn Scott</i>	Date: <i>1/29/14</i>	3. Relinquished by:	Date:	4. Received by:	Date:															
Company: Rochester Metal Product	Time: 3:00 PM	Company: <i>TA-CFT</i>	Time: <i>1000</i>	Company:	Time:	Company:	Time:															

Comments:

Level II QC/QA

Test America

2417 Bond Street

University Park, IL

Phone: 708.746.0057

Fax: 708.534.5211

## Login Sample Receipt Checklist

Client: Rochester Metal Products Corp

Job Number: 500-70740-1

Login Number: 70740

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	Unchilled
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## **Attachment 7**

### **Analytical Report for TestAmerica Job ID: 500-70741-1 Hunter Pouring Slag**



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

TestAmerica Job ID: 500-70741-1  
Client Project/Site: Hunter Pouring Slag  
Revision: 1

For:  
Rochester Metal Products Corp  
616 Indiana Ave  
Rochester, Indiana 46975

Attn: Kayla Criswell



Authorized for release by:  
2/19/2014 9:44:47 AM  
Robin Kintz, Project Manager II  
(708)534-5200  
robinm.kintz@testamericaninc.com

### LINKS

Review your project  
results through

**Total Access**

Have a Question?

ASK  
The  
Expert

Visit us at:  
[www.testamericaninc.com](http://www.testamericaninc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

## Table of Contents

Cover Page .....	1
Table of Contents .....	2
Case Narrative .....	3
Method Summary .....	4
Sample Summary .....	5
Client Sample Results .....	6
Definitions .....	7
QC Association .....	8
QC Sample Results .....	9
Chronicle .....	11
Certification Summary .....	12
Chain of Custody .....	13
Receipt Checklists .....	14

## Case Narrative

Client: Rochester Metal Products Corp  
Project/Site: Hunter Pouring Slag

TestAmerica Job ID: 500-70741-1

---

**Job ID:** 500-70741-1

**Laboratory:** TestAmerica Chicago

**Narrative**

---

Job Narrative  
500-70741-1

**Comments**

No additional comments.

**Receipt**

The sample was received on 1/29/2014 10:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice.

**Except:**

Client needed the full RCRA metals for this event, but only originally requested cadmium and barium.

**Metals**

Method(s) 6010C: The CCVL, following these samples: 500-70738-1, 500-70740-1 and 500-70741-1, was outside acceptance limits for Pb and As. The Pb was outside the upper limits and all the samples were below the RL. The As was slightly outside acceptance limits at 69% rec. The CRI (2x the RL) run after the CCVL was within acceptance limits. The samples were reported for As and Pb.

Method(s) 6010C: The leach blank for batch 221390 contained chromium above the reporting limit (RL). The following samples were extracted with that blank and were reported with a "B" flag: Hunter Pouring Slag (500-70741-1).

No other analytical or quality issues were noted.

---

**Job ID:** 500-70741-2

**Laboratory:** TestAmerica Chicago

**Narrative**

---

Job Narrative  
500-70741-2

**Comments**

No additional comments.

**Receipt**

The sample was received on 1/29/2014 10:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice.

**Metals**

No analytical or quality issues were noted.

## Method Summary

Client: Rochester Metal Products Corp  
Project/Site: Hunter Pouring Slag

TestAmerica Job ID: 500-70741-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

## Sample Summary

Client: Rochester Metal Products Corp  
Project/Site: Hunter Pouring Slag

TestAmerica Job ID: 500-70741-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-70741-1	Hunter Pouring Slag	Solid	01/27/14 11:00	01/29/14 10:00

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Hunter Pouring Slag

TestAmerica Job ID: 500-70741-1

**Client Sample ID:** Hunter Pouring Slag

**Lab Sample ID:** 500-70741-1

Date Collected: 01/27/14 11:00

Matrix: Solid

Date Received: 01/29/14 10:00

**Method: 6010C - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050	^	0.050		mg/L		01/31/14 09:00	01/31/14 18:55	1
Barium	<0.50		0.50		mg/L		01/31/14 09:00	01/31/14 18:55	1
Cadmium	<0.0050		0.0050		mg/L		01/31/14 09:00	01/31/14 18:55	1
Chromium	0.14	B	0.025		mg/L		01/31/14 09:00	01/31/14 18:55	1
Lead	<0.050	^	0.050		mg/L		01/31/14 09:00	01/31/14 18:55	1
Selenium	<0.050		0.050		mg/L		01/31/14 09:00	01/31/14 18:55	1
Silver	<0.025		0.025		mg/L		01/31/14 09:00	01/31/14 18:55	1

**Method: 7470A - Mercury (CVAA) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/17/14 07:45	02/17/14 13:05	1

TestAmerica Chicago

## Definitions/Glossary

Client: Rochester Metal Products Corp  
Project/Site: Hunter Pouring Slag

TestAmerica Job ID: 500-70741-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
A	ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,DLCK or MRL standard: Instrument related QC exceeds the control limits.
B	Compound was found in the blank and sample.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## QC Association Summary

Client: Rochester Metal Products Corp  
 Project/Site: Hunter Pouring Slag

TestAmerica Job ID: 500-70741-1

### Metals

**Leach Batch: 221390**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70741-1	Hunter Pouring Slag	TCLP	Solid	1311	
500-70741-1 DU	Hunter Pouring Slag	TCLP	Solid	1311	
500-70741-1 MS	Hunter Pouring Slag	TCLP	Solid	1311	
LB 500-221390/1-B	Method Blank	TCLP	Solid	1311	
LB 500-221390/1-D	Method Blank	TCLP	Solid	1311	

**Prep Batch: 221638**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70741-1	Hunter Pouring Slag	TCLP	Solid	3010A	221390
LB 500-221390/1-B	Method Blank	TCLP	Solid	3010A	221390
LCS 500-221638/2-A	Lab Control Sample	Total/NA	Solid	3010A	

**Analysis Batch: 221800**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70741-1	Hunter Pouring Slag	TCLP	Solid	6010C	221638
LB 500-221390/1-B	Method Blank	TCLP	Solid	6010C	221638
LCS 500-221638/2-A	Lab Control Sample	Total/NA	Solid	6010C	221638

**Prep Batch: 223495**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70741-1	Hunter Pouring Slag	TCLP	Solid	7470A	221390
500-70741-1 DU	Hunter Pouring Slag	TCLP	Solid	7470A	221390
500-70741-1 MS	Hunter Pouring Slag	TCLP	Solid	7470A	221390
LB 500-221390/1-D	Method Blank	TCLP	Solid	7470A	221390
LCS 500-223495/13-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 500-223495/12-A	Method Blank	Total/NA	Solid	7470A	

**Analysis Batch: 223594**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70741-1	Hunter Pouring Slag	TCLP	Solid	7470A	223495
500-70741-1 DU	Hunter Pouring Slag	TCLP	Solid	7470A	223495
500-70741-1 MS	Hunter Pouring Slag	TCLP	Solid	7470A	223495
LB 500-221390/1-D	Method Blank	TCLP	Solid	7470A	223495
LCS 500-223495/13-A	Lab Control Sample	Total/NA	Solid	7470A	223495
MB 500-223495/12-A	Method Blank	Total/NA	Solid	7470A	223495

TestAmerica Chicago

# QC Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Hunter Pouring Slag

TestAmerica Job ID: 500-70741-1

## Method: 6010C - Metals (ICP)

Lab Sample ID: LCS 500-221638/2-A

Matrix: Solid

Analysis Batch: 221800

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 221638

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Arsenic	0.100	0.0925	^	mg/L		92	80 - 120
Barium	2.00	2.02		mg/L		101	80 - 120
Cadmium	0.0500	0.0486		mg/L		97	80 - 120
Chromium	0.200	0.197		mg/L		98	80 - 120
Lead	0.100	0.102	^	mg/L		102	80 - 120
Selenium	0.100	0.0880		mg/L		88	80 - 120
Silver	0.0500	0.0485		mg/L		97	80 - 120

Lab Sample ID: LB 500-221390/1-B

Matrix: Solid

Analysis Batch: 221800

Client Sample ID: Method Blank  
Prep Type: TCLP  
Prep Batch: 221638

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.050	^	0.050	mg/L		01/31/14 09:00	01/31/14 18:21		1
Barium	<0.50		0.50	mg/L		01/31/14 09:00	01/31/14 18:21		1
Cadmium	<0.0050		0.0050	mg/L		01/31/14 09:00	01/31/14 18:21		1
Chromium	0.0471		0.025	mg/L		01/31/14 09:00	01/31/14 18:21		1
Lead	<0.050	^	0.050	mg/L		01/31/14 09:00	01/31/14 18:21		1
Selenium	<0.050		0.050	mg/L		01/31/14 09:00	01/31/14 18:21		1
Silver	<0.025		0.025	mg/L		01/31/14 09:00	01/31/14 18:21		1

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-223495/12-A

Matrix: Solid

Analysis Batch: 223594

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 223495

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	mg/L		02/17/14 07:45	02/17/14 12:55		1

Lab Sample ID: LCS 500-223495/13-A

Matrix: Solid

Analysis Batch: 223594

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 223495

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Mercury	0.00200	0.00218		mg/L		109	80 - 120

Lab Sample ID: LB 500-221390/1-D

Matrix: Solid

Analysis Batch: 223594

Client Sample ID: Method Blank  
Prep Type: TCLP  
Prep Batch: 223495

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	mg/L		02/17/14 07:45	02/17/14 12:58		1

TestAmerica Chicago

## QC Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Hunter Pouring Slag

TestAmerica Job ID: 500-70741-1

### Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 500-70741-1 MS

Matrix: Solid

Analysis Batch: 223594

Client Sample ID: Hunter Pouring Slag

Prep Type: TCLP

Prep Batch: 223495

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Mercury	<0.00020		0.00100	0.00109		mg/L	109		50 - 150

Lab Sample ID: 500-70741-1 DU

Matrix: Solid

Analysis Batch: 223594

Client Sample ID: Hunter Pouring Slag

Prep Type: TCLP

Prep Batch: 223495

Analyte	Sample	Sample	Spike	DU		Unit	D	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				
Mercury	<0.00020			<0.00020		mg/L		NC	20

## Lab Chronicle

Client: Rochester Metal Products Corp  
Project/Site: Hunter Pouring Slag

TestAmerica Job ID: 500-70741-1

Client Sample ID: Hunter Pouring Slag

Lab Sample ID: 500-70741-1

Date Collected: 01/27/14 11:00

Matrix: Solid

Date Received: 01/29/14 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Prepared			
					Number	or Analyzed	Analyst	Lab
TCLP	Leach	1311			221390	01/29/14 13:45	CMV	TAL CHI
TCLP	Prep	3010A			221638	01/31/14 09:00	LA1	TAL CHI
TCLP	Analysis	6010C		1	221800	01/31/14 18:55	PJ1	TAL CHI
TCLP	Leach	1311			221390	01/29/14 13:45	CMV	TAL CHI
TCLP	Prep	7470A			223495	02/17/14 07:45	RLL	TAL CHI
TCLP	Analysis	7470A		1	223694	02/17/14 13:05	RLL	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TestAmerica Chicago

## Certification Summary

Client: Rochester Metal Products Corp  
 Project/Site: Hunter Pouring Slag

TestAmerica Job ID: 500-70741-1

### Laboratory: TestAmerica Chicago

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	04-30-14
California	NELAP	9	01132CA	04-30-14 *
Georgia	State Program	4	N/A	04-30-14
Hawaii	State Program	9	N/A	04-30-14
Illinois	NELAP	5	100201	04-30-14
Indiana	State Program	5	C-IL-02	04-30-14 *
Iowa	State Program	7	82	05-01-14 *
Kansas	NELAP	7	E-10161	10-31-14
Kentucky (UST)	State Program	4	66	04-30-14
Louisiana	NELAP	6	30720	06-30-14
Massachusetts	State Program	1	M-IL035	06-20-14
Mississippi	State Program	4	N/A	04-30-14
North Carolina DENR	State Program	4	291	12-31-14
North Dakota	State Program	8	R-194	04-30-14
Oklahoma	State Program	6	8908	08-31-14
South Carolina	State Program	4	77001	04-30-14
Texas	NELAP	6	T104704252-09-TX	02-28-14
USDA	Federal		P330-12-00038	02-06-15
Wisconsin	State Program	5	999580010	08-31-14
Wyoming	State Program	8	8TMS-Q	04-30-14

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Chicago



THE LEADER IN ENVIRONMENTAL TESTING



500-70741 COC

## HAIN OF CUSTODY RECORD

500-70741

Customer Information		Project Information		Analysis Methods															
PO:		Project Name:	Hunter Pouring Slag	A	TCLP Extraction	K													
WO:		Lab Number:		B	TCLP Barium	L													
Company:	Rochester Metal Products Corp	Bill To:	Same	C	TCLP Cadmium	M													
Report to:	Kayla Criswell	Invoice ATTN:		D		N													
Address:	616 Indiana Ave P.O. Box 488 Rochester, IN 46975-0488	Address:		E		O													
Phone:	574-223-0461	Phone:	Same	F		P													
Fax:	574-223-2326	Fax:		G		Q													
				H		R													
				I		Other:													
				J															

No.	Sample Description	Preservation	SAMPLE INFORMATION																					
			Date	Time	Type	Matrix	# Container	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Hunter Pouring Slag	None	1/27/2014	11:00	Grab	Solid		X	X	X														
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								

Sampler: Kayla Criswell	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	Shawn Scott	
1. Relinquished by:	Date:	2. Received by:	Date:	3. Relinquished by:	Date:	4. Received by:	Date:																	
K. Criswell	1/27/2014																							
Company:	Time:	Company:	Time:	Company:	Time:	Company:	Time:	Company:	Time:	Company:	Time:	Company:	Time:	Company:	Time:	Company:	Time:	Company:	Time:	Company:	Time:	Company:	Time:	
Rochester Metal Product	3:00 PM	TA-CET	10:00																					

Comments:	Level II QC/QA
-----------	----------------

Test America

2417 Bond Street

University Park, IL

Phone: 708.746.0057

Fax: 708.534.5211

## Login Sample Receipt Checklist

Client: Rochester Metal Products Corp

Job Number: 500-70741-1

Login Number: 70741

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	Unchilled
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## **Attachment 8**

### **Analytical Report for TestAmerica Job ID: 500-70966-1 Slag Test**



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

TestAmerica Job ID: 500-70966-1  
Client Project/Site: Slag Test  
Revision: 1

For:  
Rochester Metal Products Corp.  
616 Indiana Ave  
Rochester, Indiana 46975

Attn: Kayla Criswell

*Robin M Kintz*

Authorized for release by:  
2/25/2014 3:44:49 PM

Robin Kintz, Project Manager II  
(708)534-5200  
[robin.m.kintz@testamericainc.com](mailto:robin.m.kintz@testamericainc.com)

### LINKS

Review your project  
results through

**Total Access**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



## Table of Contents

Cover Page .....	1
Table of Contents .....	2
Case Narrative .....	3
Method Summary .....	4
Sample Summary .....	5
Client Sample Results .....	6
Definitions .....	9
QC Association .....	10
QC Sample Results .....	11
Chronicle .....	12
Certification Summary .....	13
Chain of Custody .....	14
Receipt Checklists .....	15

## Case Narrative

Client: Rochester Metal Products Corp  
Project/Site: Slag Test

TestAmerica Job ID: 500-70966-1

**Job ID:** 500-70966-1

Laboratory: TestAmerica Chicago

### Narrative

#### Job Narrative 500-70966-1

### Comments

No additional comments.

### Receipt

The samples were received on 2/3/2014 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Except:

Client requested to add full RCRA 8 metals rather than what was originally requested on the chain of custody and reported. The report will be revised and all data will be included in a single report.

### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Job ID:** 500-70966-2

Laboratory: TestAmerica Chicago

### Narrative

#### Job Narrative 500-70966-2

### Comments

No additional comments.

### Receipt

The samples were received on 2/3/2014 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## Method Summary

Client: Rochester Metal Products Corp  
Project/Site: Slag Test

TestAmerica Job ID: 500-70966-1



Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TestAmerica Chicago

## Sample Summary

Client: Rochester Metal Products Corp  
Project/Site: Slag Test

TestAmerica Job ID: 500-70966-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-70966-1	Slag Rolloff 1	Solid	01/31/14 11:00	02/03/14 10:00
500-70966-2	Slag Rolloff 2	Solid	01/31/14 11:00	02/03/14 10:00
500-70966-3	Slag Rolloff 3	Solid	01/31/14 11:00	02/03/14 10:00



TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
 Project/Site: Slag Test

TestAmerica Job ID: 500-70966-1

**Client Sample ID: Slag Rolloff 1**

Date Collected: 01/31/14 11:00

Date Received: 02/03/14 10:00

**Lab Sample ID: 500-70966-1**

Matrix: Solid

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050		mg/L		02/06/14 09:30	02/06/14 13:09	1
Barium	15		0.50		mg/L		02/06/14 09:30	02/06/14 13:09	1
Cadmium	<0.0050		0.0050		mg/L		02/06/14 09:30	02/06/14 13:09	1
Chromium	0.071		0.025		mg/L		02/06/14 09:30	02/06/14 13:09	1
Lead	<0.050		0.050		mg/L		02/06/14 09:30	02/06/14 13:09	1
Selenium	<0.050		0.050		mg/L		02/06/14 09:30	02/06/14 13:09	1
Silver	<0.025		0.025		mg/L		02/06/14 09:30	02/06/14 13:09	1

**Method: 7470A - Mercury (CVAA) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/24/14 12:15	02/25/14 09:13	1

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Slag Test

TestAmerica Job ID: 500-70966-1

### Client Sample ID: Slag Rolloff 2

Date Collected: 01/31/14 11:00

Lab Sample ID: 500-70966-2

Date Received: 02/03/14 10:00

Matrix: Solid

#### Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050		mg/L	02/06/14 09:30	02/06/14 13:15		1
Barium	<0.50		0.50		mg/L	02/06/14 09:30	02/06/14 13:15		1
Cadmium	<0.0060		0.0050		mg/L	02/06/14 09:30	02/06/14 13:15		1
Chromium	0.071		0.025		mg/L	02/06/14 09:30	02/06/14 13:15		1
Lead	<0.050		0.050		mg/L	02/06/14 09:30	02/06/14 13:15		1
Selenium	<0.060		0.050		mg/L	02/06/14 09:30	02/06/14 13:15		1
Silver	<0.025		0.025		mg/L	02/06/14 09:30	02/06/14 13:15		1

#### Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L	02/24/14 12:15	02/25/14 09:15		1

TestAmerica Chicago

## Client Sample Results

Client: Rochester Metal Products Corp  
 Project/Site: Slag Test

TestAmerica Job ID: 500-70966-1



**Client Sample ID:** Slag Rolloff 3

Date Collected: 01/31/14 11:00

Date Received: 02/03/14 10:00

**Lab Sample ID:** 500-70966-3

Matrix: Solid



**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050		mg/L		02/06/14 09:30	02/06/14 13:21	1
Barium	93		5.0		mg/L		02/06/14 09:30	02/06/14 15:00	10
Cadmium	<0.0050		0.0050		mg/L		02/06/14 09:30	02/06/14 13:21	1
Chromium	0.076		0.025		mg/L		02/06/14 09:30	02/06/14 13:21	1
Lead	<0.050		0.050		mg/L		02/06/14 09:30	02/06/14 13:21	1
Selenium	<0.050		0.050		mg/L		02/06/14 09:30	02/06/14 13:21	1
Silver	<0.025		0.025		mg/L		02/06/14 09:30	02/06/14 13:21	1

**Method: 7470A - Mercury (CVAA) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		02/24/14 12:15	02/25/14 09:17	1

TestAmerica Chicago

## Definitions/Glossary

Client: Rochester Metal Products Corp

Project/Site: Slag Test

TestAmerica Job ID: 500-70966-1



### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TestAmerica Chicago

## QC Association Summary

Client: Rochester Metal Products Corp  
Project/Site: Slag Test

TestAmerica Job ID: 500-70966-1

### Metals

#### Leach Batch: 222005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70966-1	Slag Rolloff 1	TCLP	Solid	1311	
500-70966-2	Slag Rolloff 2	TCLP	Solid	1311	
500-70966-3	Slag Rolloff 3	TCLP	Solid	1311	
LB 500-222005/1-C	Method Blank	TCLP	Solid	1311	

#### Prep Batch: 222285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70966-1	Slag Rolloff 1	TCLP	Solid	3010A	222005
500-70966-2	Slag Rolloff 2	TCLP	Solid	3010A	222005
500-70966-3	Slag Rolloff 3	TCLP	Solid	3010A	222005
LB 500-222005/1-C	Method Blank	TCLP	Solid	3010A	222005
LCS 500-222285/4-A	Lab Control Sample	Total/NA	Solid	3010A	

#### Analysis Batch: 222313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70966-1	Slag Rolloff 1	TCLP	Solid	6010B	222285
500-70966-2	Slag Rolloff 2	TCLP	Solid	6010B	222285
500-70966-3	Slag Rolloff 3	TCLP	Solid	6010B	222285
LB 500-222005/1-C	Method Blank	TCLP	Solid	6010B	222285
LCS 500-222285/4-A	Lab Control Sample	Total/NA	Solid	6010B	222285

#### Analysis Batch: 222333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70966-3	Slag Rolloff 3	TCLP	Solid	6010B	222285

#### Leach Batch: 224307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70966-1	Slag Rolloff 1	TCLP	Solid	1311	
500-70966-2	Slag Rolloff 2	TCLP	Solid	1311	
500-70966-3	Slag Rolloff 3	TCLP	Solid	1311	
LB 500-224307/1-D	Method Blank	TCLP	Solid	1311	

#### Prep Batch: 224453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70966-1	Slag Rolloff 1	TCLP	Solid	7470A	224307
500-70966-2	Slag Rolloff 2	TCLP	Solid	7470A	224307
500-70966-3	Slag Rolloff 3	TCLP	Solid	7470A	224307
LB 500-224307/1-D	Method Blank	TCLP	Solid	7470A	224307
LCS 500-224453/13-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 500-224453/12-A	Method Blank	Total/NA	Solid	7470A	

#### Analysis Batch: 224579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-70966-1	Slag Rolloff 1	TCLP	Solid	7470A	224453
500-70966-2	Slag Rolloff 2	TCLP	Solid	7470A	224453
500-70966-3	Slag Rolloff 3	TCLP	Solid	7470A	224453
LB 500-224307/1-D	Method Blank	TCLP	Solid	7470A	224453
LCS 500-224453/13-A	Lab Control Sample	Total/NA	Solid	7470A	224453
MB 500-224453/12-A	Method Blank	Total/NA	Solid	7470A	224453

TestAmerica Chicago

## QC Sample Results

Client: Rochester Metal Products Corp  
Project/Site: Slag Test

TestAmerica Job ID: 500-70966-1



### Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-222285/4-A				Client Sample ID: Lab Control Sample					
				Prep Type: Total/NA Prep Batch: 222285					
Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.		
	Added	Result	Qualifier						
Arsenic	0.100	0.0966		mg/L		97	80	-120	
Barium	2.00	1.96		mg/L		98	80	-120	
Cadmium	0.0500	0.0480		mg/L		96	80	-120	
Chromium	0.200	0.196		mg/L		98	80	-120	
Lead	0.100	0.100		mg/L		100	80	-120	
Selenium	0.100	0.0923		mg/L		92	80	-120	
Silver	0.0500	0.0489		mg/L		98	80	-120	

### Lab Sample ID: LB 500-222005/1-C

Lab Sample ID: LB 500-222005/1-C				Client Sample ID: Method Blank					
				Prep Type: TCLP Prep Batch: 222285					
Analyte	LB	LB	Unit	D	Prepared	Analyzed	%Rec.		
	Result	Qualifier							
Arsenic	<0.050		mg/L		02/06/14 09:30	02/06/14 12:56			1
Barium	<0.50		mg/L		02/06/14 09:30	02/06/14 12:56			1
Cadmium	<0.0050		mg/L		02/06/14 09:30	02/06/14 12:56			1
Chromium	<0.025		mg/L		02/06/14 09:30	02/06/14 12:56			1
Lead	<0.050		mg/L		02/06/14 09:30	02/06/14 12:56			1
Selenium	<0.050		mg/L		02/06/14 09:30	02/06/14 12:56			1
Silver	<0.025		mg/L		02/06/14 09:30	02/06/14 12:56			1

### Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-224453/12-A				Client Sample ID: Method Blank					
				Prep Type: Total/NA Prep Batch: 224453					
Analyte	MB	MB	Unit	D	Prepared	Analyzed	%Rec.		
	Result	Qualifier							
Mercury	<0.00020		mg/L		02/24/14 12:15	02/25/14 08:44			1

### Lab Sample ID: LCS 500-224453/13-A

Lab Sample ID: LCS 500-224453/13-A				Client Sample ID: Lab Control Sample					
				Prep Type: Total/NA Prep Batch: 224453					
Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.		
	Added	Result	Qualifier						
Mercury	0.00200	0.00224		mg/L		112	80	-120	

### Lab Sample ID: LB 500-224307/1-D

Lab Sample ID: LB 500-224307/1-D				Client Sample ID: Method Blank					
				Prep Type: TCLP Prep Batch: 224453					
Analyte	LB	LB	Unit	D	Prepared	Analyzed	%Rec.		
	Result	Qualifier							
Mercury	<0.00020		mg/L		02/24/14 12:15	02/25/14 09:12			1

TestAmerica Chicago

## Lab Chronicle

Client: Rochester Metal Products Corp  
Project/Site: Slag Test

TestAmerica Job ID: 500-70966-1



### Client Sample ID: Slag Rolloff 1

Date Collected: 01/31/14 11:00

Date Received: 02/03/14 10:00

### Lab Sample ID: 500-70966-1

Matrix: Solid



Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			222005	02/04/14 13:00	CMV	TAL CHI
TCLP	Prep	3010A			222285	02/06/14 09:30	LA1	TAL CHI
TCLP	Analysis	6010B		1	222313	02/06/14 13:09	LEG	TAL CHI
TCLP	Leach	1311			224307	02/22/14 14:00	CMV	TAL CHI
TCLP	Prep	7470A			224453	02/24/14 12:15	PFK	TAL CHI
TCLP	Analysis	7470A		1	224579	02/25/14 09:13	RLL	TAL CHI

### Client Sample ID: Slag Rolloff 2

Date Collected: 01/31/14 11:00

Date Received: 02/03/14 10:00

### Lab Sample ID: 500-70966-2

Matrix: Solid



Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			222005	02/04/14 13:00	CMV	TAL CHI
TCLP	Prep	3010A			222285	02/06/14 09:30	LA1	TAL CHI
TCLP	Analysis	6010B		1	222313	02/06/14 13:15	LEG	TAL CHI
TCLP	Leach	1311			224307	02/22/14 14:00	CMV	TAL CHI
TCLP	Prep	7470A			224453	02/24/14 12:15	PFK	TAL CHI
TCLP	Analysis	7470A		1	224579	02/25/14 09:15	RLL	TAL CHI

### Client Sample ID: Slag Rolloff 3

Date Collected: 01/31/14 11:00

Date Received: 02/03/14 10:00

### Lab Sample ID: 500-70966-3

Matrix: Solid



Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			222005	02/04/14 13:00	CMV	TAL CHI
TCLP	Prep	3010A			222285	02/06/14 09:30	LA1	TAL CHI
TCLP	Analysis	6010B		1	222313	02/06/14 13:21	LEG	TAL CHI
TCLP	Leach	1311			222005	02/04/14 13:00	CMV	TAL CHI
TCLP	Prep	3010A			222285	02/06/14 09:30	LA1	TAL CHI
TCLP	Analysis	6010B		10	222333	02/06/14 15:00	LEG	TAL CHI
TCLP	Leach	1311			224307	02/22/14 14:00	CMV	TAL CHI
TCLP	Prep	7470A			224453	02/24/14 12:15	PFK	TAL CHI
TCLP	Analysis	7470A		1	224579	02/25/14 09:17	RLL	TAL CHI

#### Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TestAmerica Chicago

## Certification Summary

Client: Rochester Metal Products Corp  
Project/Site: Slag Test

TestAmerica Job ID: 500-70966-1

### Laboratory: TestAmerica Chicago

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	04-30-14
California	NELAP	9	01132CA	04-30-14 *
Georgia	State Program	4	N/A	04-30-14
Hawaii	State Program	9	N/A	04-30-14
Illinois	NELAP	5	100201	04-30-14
Indiana	State Program	5	C-IL-02	04-30-14 *
Iowa	State Program	7	82	05-01-14 *
Kansas	NELAP	7	E-10161	10-31-14
Kentucky (UST)	State Program	4	66	04-30-14
Louisiana	NELAP	6	30720	06-30-14
Massachusetts	State Program	1	M-IL035	06-30-14
Mississippi	State Program	4	N/A	04-30-14
North Carolina DENR	State Program	4	291	12-31-14
North Dakota	State Program	8	R-194	04-30-14
Oklahoma	State Program	6	8908	08-31-14
South Carolina	State Program	4	77001	04-30-14
Texas	NELAP	6	T104704252-09-TX	02-28-14
USDA	Federal		P330-12-00038	02-06-15
Wisconsin	State Program	5	999580010	08-31-14
Wyoming	State Program	8	8TMS-Q	04-30-14

\* Expired certification is currently pending renewal and is considered valid.

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## CHAIN OF CUSTODY RECORD

500-70966



500-70966 COC

Customer Information		Project Information		Analysis/Methods														
PO:		Project Name:	Slag Test	A	TCLP Extraction	K												
WO:		Lab Number:		B	TCLP Barium	L												
Company:	Rochester Metal Products Corp	Bill To:	Same	C	TCLP Cadmium	M												
Report to:	Kayla Criswell	Invoice ATTN:		D		N												
Address:	616 Indiana Ave P.O.Box 488 Rochester, IN 46975-0488	Address:		E		O												
Phone:	574-223-0461	Phone:	Same	F		P												
Fax:	574-223-2326	Fax:		G		Q												
				H		R												
				I		Other:												
				J														

SAMPLE INFORMATION																										
No.	Sample Description	Preservation	Date	Time	Type	Matrix	# Container	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
1	Slag Rolloff 1	None	1/31/2014	11:00	Grab	Solid		X	X	X																
2	Slag Rolloff 2	None	1/31/2014	11:00	Grab	Solid		X	X	X																
3	Slag Rolloff 3	None	1/31/2014	11:00	Grab	Solid		X	X	X																
4																										
5																										
6																										
7																										
8																										
9																										
10																										

Sampler:	Kayla Criswell		Shipment Method:	UPS	Required Turnaround:	3 Days	
1. Relinquished by:	Date:	2. Received by:	Date:	3. Relinquished by:	Date:	4. Received by:	Date:
K. Criswell	1/31/2014	<i>JK</i>	02/03/14				
Company:	Time:	Company:	Time:	Company:	Time:	Company:	Time:
Rochester Metal Product	3:00 PM	TAL	10:00				

Comments:
Level II QC/QA

Test America

2417 Bond Street

University Park, IL

Phone: 708.746.0057

Fax: 708.534.5211

## Login Sample Receipt Checklist

Client: Rochester Metal Products Corp

Job Number: 500-70966-1

Login Number: 70966

List Source: TestAmerica Chicago

List Number: 1

Creator: Kelsey, Shawn M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

## Login Sample Receipt Checklist

Client: Rochester Metal Products Corp

Job Number: 500-70966-2

Login Number: 70966

List Source: TestAmerica Chicago

List Number: 1

Creator: Kelsey, Shawn M

Question	Answer	Comment
Radioactivity wasn't checked or is <= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	